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Original Communications.

THE GOSPEL OF PATENT MEDICINES.*

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BIRMINGHAM ALA.

I have been asked a number of times by ministers of the gospel this question, "What is there in the study and in the practice of medicine that destroys the faith of so many students and practitioners and turns them into sceptics and infidels?"

Usually I have replied to this, only by denying that there was any more scepticism among physicians than in any other class of professional men. About a twelfth month ago, however, when this same question was put to me by one of my clergyman friends, I replied that just so soon as preachers would cease to encourage patent medicine frauds by testimonials and by permitting the insertion of their advertisements in the religious press, I had no doubt but that doctors of divinity and doctors of medicine would be found standing not so far apart.

At the same time I pointed out to this gentleman that the false prophets and the frauds of religion were no more obnoxious to orthodox ministers than were the false prophets and frauds of medicine to honest doctors. I asked him as an influential citizen and as a minister to start a crusade against the publication of all patent medicines in the religious papers.

Now that a year has gone by since this request was made, and no movement for the correction of this evil has been started in that

*Read before the Jefferson County Medical Society and the Ministers of Birmingham, January 22, 1906.

quarter, in which it should originate, I feel at liberty to openly criticize the local religious press.

I have here copies of the Alabama Christian Advocate of date Jan. 11th, 1906, and of the Alabama Baptist of date Jan. 10th, 1906.

The Christian Advocate is the official organ of the Alabama and the North Alabama Conferences of the M. E. Church, South. Besides an editor and an assistant, the Advocate has a publishing committee composed of five men from each conference.

The Alabama Baptist is owned and published by one man, but the paper is officially recognized as its organ by the Baptist State Convention.

Of the seventy-two advertisements in the Advocate, twenty are patent medicines or fake medical devices.

Of the fifty-two advertisements in the Baptist, twenty-one are of patent medicines or fake medical devices.

Twelve of these advertisements appear alike in both papers. These are as follows:

1. Mrs. Winslow's Soothing Syrup, (2 insertions in each.)
2. Mozley's Lemon Elixir.
3. Dr. Lord's Headache Powders.
4. Johnson's Chill and Fever Tonic.
5. "Catarrh and Deafness Specialist" Sproule.
6. Dr. Blosser's Cure for Catarrh and Weak Lungs.
7. Rose Drug Co.'s Tobacco Cure.
8. Cuticura.
9. Tetterine.
10. Dr. Bye's Soothing and Balmy Oils for cure of cancer, etc.
11. Merit's Blood Tablets.
12. Keeley Cure.

The additional advertisements in the several papers are as follows:
In the Advocate.

1. Actina.
2. Mrs. M. Summer's Preparation for Female Troubles.
3. The Marvel Whirling Spray Syringe.
4. Wine of Cardui.
5. Dr. Johnson's Mild Treatment for Cancer.
6. Horsford's Acid Phosphate for feeble children.
7. Radius Optical Co.

In the Baptist.

1. Shoop's Heart Resterative.
2. Sloan's Linament.
3. Specific Pharmica Co's Pile Cure.
4. Hutchin's Eczema Cure.
5. Dr. Hathaway, Specialist.

6. Scott's Emulsion.
7. Kellan Cancer Hospital.
8. Alivio Chemical Co.'s Mole Remover.

As a sort of an apology, I suppose, for these advertisements, one of the papers announces that it will insert obituary notices of not more than 300 words free of charge. I do not insist, however, that there is any special significance to the rather long list of obituaries appearing in both papers. The fraud contained in many of these advertisements is altogether too glaring to permit any plea of ignorance of their character on the part of the publishers. Let us examine some of them with more detail.

In the advertisement it is claimed that 'Actina restores eyesight and there is no need for cutting, drugging, or probing the eye for most forms of disease; for a new system of treating afflictions of the eye has been discovered, whereby all tortuous methods are eliminated. Hundreds of people have been cured of failing eyesight, cataracts, granulated lids and other afflictions of the eye through this grand discovery.'

If I could wish any harm to the gentlemen, who publish these papers, I would sincerely recommend the Actina treatment for their personal use. In the event of its trial, I am quite confident that it would prove an "eye-opener" and they might even be able to see things to which they now seem blind.

This Actina advertisement is accompanied by four testimonials—two of them from preachers. The Rev. W. C. Goodwin says, "My honest opinion of Actina is that it is one of the most marvelous discoveries of the age. It cured my eyes and my wife of Asthma." From the reading of this testimonial, I infer that it was necessary for but one of these good people to take treatment to cure both. If this inference is correct, the testimonial illustrates not only a marvelous remedy in scope but a conjugal relation marvelous in itself.

The fraud of the advertisement is all too apparent. Actina is used alike for all conditions of the eye. Any specialist or any physician, of the most ordinary limitations of knowledge, would know that he laid himself liable to suit for malpractice, if he attempted to treat a diseased kidney by an electric massage of the eye, which as I understand, is the Actina treatment. But it is presumable that Prof. Wilson, the discoverer of this treatment, never heard nor knew that Bright's disease ever caused an "affliction" of the eye.

Dr. Lord's Headache Powders is a preparation put up by the Collier Drug Co., of this city. Mr. Austin, a member of the company, frankly admits to me that these powders contain acetanilid. He is not, however, quite so frank in his reply to a question as to the amount of acetanilid contained but tells me that 'there are about 2 grains to the dose.'

There are twelve powders in each box and with the following directions: "Place a powder upon the tongue and take a swallow of water. If necessary, repeat in 20 minutes. Children under 16 years of age, a part of a powder in proportion to age." These powders "will cure sick and nervous headache and neuralgia. Sickness and sourness of stomach quickly relieved."

Since the physiological action of the powder could hardly be felt in 20 minutes it is safe to assume that for the mildest headache as much as two powders at least would be taken; and for any warning contained in the directions, an individual could continue, at 20 minute interval, taking powders until the whole contents were consumed, and to relieve some headaches, such as we physicians have all seen at times, if the individual were not dead after the first box, another would have to be sent for.

Across the face of the box is this significant announcement, "Will cure twelve heads one time or one head twelve times."

The latter part of the announcement reminds me of the good brother, who said that it was a dead easy thing to break away from the tobacco habit and for proof, proudly asserted that he himself had quit the habit no less than six times.

I wonder how long we doctors would retain patients if we told any of them that we could cure a certain complaint twelve times at so much per cure! And yet there are some otherwise sane people, who go on buying headache nostrums and go on "curing" themselves until the habit is fixed. They do this at great expense to their nervous and circulatory systems and only to the gain of the fraudulent manufacturers.

Twenty-two deaths due to the use of acetanalid headache nostrums are known to have occurred within the past two years in the U. S. Because of the difficulties in compiling, such a report is necessarily incomplete. But twenty-two deaths ought to be many enough to convince any one, except the willingly blind, that acetanalid is a deadly poison, capable of dire results in ignorant hands.

In justice to the Collier Drug Co., I will say that almost every drug house in the city prepares and advertises some acetanalid headache cure.

In justice to the publishers of the Advocate and the Baptist, I will say that the Medical Association of Alabama ought long since have made it impossible for any paper to secure advertisements of such preparations by forcing the legislature to pass a law prohibiting the sale of acetanalid except on the prescription of a physician.

Dr. Bye's 'soothing and balmy oils for the cure of cancer, tumor, catarrh, piles, fistula, ulcers, eczema and all skin and female troubles' is another ad appearing in both papers.

That any oil potent enough to remove tumors, piles, and cancers,—for the accomplishment of which we, poor doctors, are forced to use the knife—that any oil potent enough for these, could be either soothing or balmy is a contradiction striking enough to be humorous, could we forget the mind, soul, and body sick train following “Dr.” Bye in hope for relief.

It is claimed for “Mrs. Winslow’s Soothing Syrup for Teething Children” that it will soothe the child, soften the gums, allay all pain, cure wind colic and is the best remedy for diarrhea.’

I will not deny that results follow the use of this preparation. Its most powerful ingredient is opium.

Certainly opium will soothe a child and will allay its pain. But the cost!

It deranges both the nervous and the digestive systems, thereby only prolonging teething and converting a physiological process into a pathological condition.

So far from being able to cure wind colic, opium, by inhibiting peristalsis, works directly against nature’s own effort at relief, following an expulsion of gases and fermenting matter from the bowels.

In connection with soothing syrups, it will not be out of place to quote a layman. Samuel Hopkins Adams, in a recent number of Collier’s Weekly, says: “This perilous stuff (opium) is the ideal basis for a patent medicine because its results are immediate (tho never permanent) and it is its own best advertisement in that one dose imperatively calls for another.”

When we consider how carefully and cautiously drugs must be administered to a sick child, we feel absolutely safe in asserting that soothing syrups of the Winslow class have been and are, responsible for many a child’s death. They are too often responsible for a condition even worse than death. It is a proven fact that the opium habit is not infrequently established in infancy through the agency of soothing syrups and at the hands of some deluded mother.

This mother might first have seen the advertisement in a religious paper. Knowing and trusting the men responsible for its appearance there, she accepted it and used it against her own child, in all ignorance of her crime.

All patent medicines to my mind are bad. Some are worse than others. But of all this damnable rubbish, in its conception the most hellish is that designed for the drugging of helpless infants. If I were one of the sceptics or infidels of whom, some ministers claim, there are so many in the medical profession, I would a hundred fold rather trust myself as such to the mercy of a just God than to be compelled to face Him at the judgment as an abettor and an accomplice

of those, who for the gain of dollars, would sacrifice the lives of innocent babes!

In the Advocate Mrs. M. Summers, Notre Dame, Ind., advertises a "preparation for the cure of Leucorrhoea, Ulceration, Displacement, Falling of the Womb, Scanty and Painful Periods, Tumors or Growths, Hot Flashes, Desire to Cry, Creeping feeling up the Spine, Pain in the Back, and all female troubles."

Mrs. Summers is a modest lady, however, and only allows the one word, 'simple' to describe this wonderful preparation, and she makes no mention of being gifted in curing other diseases. But in the advertising columns of the secular press you will find that this "lady" can also cure rheumatism, bed wetting, etc.

We will confine ourselves, however, to the ad at hand, in which this estimable "lady" guarantees a cure for any of the conditions mentioned. The guarantee is an entirely safe proposition for Mrs. Summers. Running some may not read but let us see what it says: "If you decide to continue (the treatment) it will only cost you about 12 cents a week to guarantee a cure."

Just how long one must decide to continue the treatment for a cure of any of the conditions mentioned is, of course, very prudently not specified by Mrs. Summers.

If a woman is in such a deplorably diseased condition that she has "a desire to cry," naturally Mrs. Summers could not be expected to tell definitely at what time a cure could be expected. However, if a patient with a fallen or displaced womb should become discouraged after taking treatment for some weeks and should write Mrs. Summers a despondent letter, we can easily picture the letter which this dear benefactress would write back. Such a letter would express the special interest of the "Notre Dame lady" in the case and it would be filled with words of encouragement and words of assurance that the goal was ahead!

True, to the sufferer, the goal still seems a little indefinitely away but then surely this kindly, motherly, Christian lady would not deceive her,—and so she goes in for more weeks of treatment. It only costs about 12 cents per week! The impudence of this female advertiser in ever speaking of herself as a "lady" and in calling her individual correspondents "woman;" equals that contained in a message brought to my office not long ago by a negro man: "A culled lady on Fifth Avenue say dat you is to come see dat 'ite 'oman she cooks foo."

This whole advertisement is a lie—and it doesn't take a doctor to stamp it as such. I wrote to Mrs. Summers, forging my wife's name. The reply which I received was signed by Mrs. Summers but the literature and advertising matter enclosed revealed the fact that, if there is any such person as Mrs. Summers at all, she is only used as

a figure head in order to induce women to disclose their inmost secrets in the belief that these are told to one of their own sex. The real parties back of this advertisement are none other than Vanderhoof and Company, who are the manufacturers of some seventeen other fake preparations.

I would like to know if Vanderhoof and Co.'s name was not signed to the contract of "Mrs. Summers" advertisement and if it was not known at the time of its acceptance by the paper in which it appears, that it would be used as a deception on the paper's women-readers!

But this advertisement is worse than a deception or a lie. It is thoroughly indecent and unfit to come to the eyes of children. It is the religious paper that is handled more and read more than any other by the children in many homes. No one who understands children, will deceive himself into thinking that a child will discontinue his reading after he had finished "all the good things" in a paper.

The fit companion of this advertisement is to be found in The Baptist, namely,—Dr. Hathaway, the Specialist.

Some of the secular papers are now refusing to publish advertisements like these latter.

By a wise law, some states are now prohibiting their appearance in any paper or papers. This is done not so much because of the fraud therein but because such advertisements are held to be obscene and indecent.

Isn't it a remarkable comment on Christian churchmen that they are less discriminating on questions of morality than are some of the editors of secular papers and some of our state legislators?

Another indecent ad is that of the Marvel Whirling Spray Syringe. This ad accompanied by a picture appears in the Advocate.*

Every doctor who knows anything about this syringe knows that it is sold chiefly as an instrument for preventing conception and that its advertisements are suggestive enough to make us feel that it is manufactured to be sold as such an instrument. If the publishers of the paper are ignorant of these facts, they are far less discerning than are the majority of their readers.

Youth is the period of curiosity and of temptation. It requires no stretch of the imagination to trace the downfall of some young girl to a too close reading of the Alabama Christian Advocate.

I apologize to the physicians present for going into the obnoxious details of these advertisements. For you I only needed to mention their names and you would have recognized their character. But I

*The Editor of the Advocate stated at the meeting at which this article was read that this advertisement was inserted in his paper during his absence from the city and that after appearing in two issues was cut out by him.

hope my paper will accomplish a purpose for which a fuller discussion was made necessary.

Many things that I have said in this paper, I have felt for some time but what directly prompted me to this writing was the way in which the editor of the Christian Advocate dismissed a subscriber's criticism of the paper's advertising standard.

I will read these clippings from the editorial notes of the Advocate:

"A good sister writing to us last week to renew her subscription said that they could not do without the Advocate in her home, that the entire family looked forward to its coming and eagerly read all that was in it, and that in the weekly prayer service of the home, in which the whole family took part, something from the Advocate was read. We are so glad to know that some homes are blessed by the visitations of the paper.

"Contrast the above with what a brother from another part of the state said: 'Inclosed find one dollar to pay for the Advocate for 1905, and stop the paper. The soul cannot live on patent medicine and fertilizers.' The good woman and her children found in the ten pages of reading matter many things for her soul's comfort and nourishment. Why? Because that was what she was interested in. The brother was scenting around for something to object to—passed all the good things said by the writers for the paper and lit upon the advertisements that were only intended for people that wanted something of that kind. Why did he do this? Let the boy that stands next to head answer that question."

I do not wish to represent myself as 'the boy that stands next to head,' but I do wish to protest against this curt and frivolous dismissal of a subscriber's just criticism.

What if this subscriber was 'scenting around for something to object to'? His offense then is great enough to put him in the class with the Folks, the LaFolletes, the Tarbells,—the reformers of the day!

'These advertisements are only intended for people wanting something of that kind!'

I would like to ask this editor what he would think of a minister, who builded a saloon, a brothel, and a church under one roof, and who said in defense of such a structure that the church was big enough for all good people and that the other two places were 'only intended for people wanting something of that kind.'

I would like to ask him how he reconciles this announcement in his paper: "We want it understood that the Advocate shall stand for the temperance cause," or this, "It is to be hoped that Alabama will not become a center of brewing industries.... Let Christians be on

their guard and give no encouragement to the cursed business,"—how does he reconcile these announcements, his conscience, and his advertisement of the Wine of Cardui?

In closing I wish to say that I have no desire to enter into controversy with the editors of these papers, or who are equally culpable, with the ministers of their respective denominations. I have the greatest respect and the highest admiration for ministers as a class. To my mind, they are the very best investment that a city can make. Yet they are the most overworked but the most under valued and underpaid of us all!

I have several warm and dear friends among them.

The men who edit these papers are too well known and too well loved for any one to convict them of hypocrisy,—and I trust no one has so far misunderstood me as to think such an attempt is being made. If I have said some things bluntly, even coarsely, it has been with no intent to offend. What I have said about these evils, I have said as forcibly and as strongly as I know how, but my one purpose has been to make these men see these evils as they are. For when they see them in their true light, none will prove better allies than they in fighting them.

Come over, brothers, and be on the Lord's side!

REPORT OF MAJOR OPERATIONS AT ST. VINCENT'S HOSPITAL FROM JAN. 1ST TO SEPT. 1ST, 1905.

By E. M. ROBINSON, M.D.

Gynecologist and Abdominal Surgeon to St. Vincent's Hospital.

BIRMINGHAM, ALA.

These operations were performed at St. Vincent's Hospital, between January 1st and September 1, 1905, and it will be seen that no plastic operations are included in this report.

The appendix was removed in thirty-six cases; of this number, there were thirteen cases which were gangrenous or contained pus; of this number there were probably three which did not require drainage; the appendix, while it contained pus was gotten out without rupture. Where no free pus is present, I deem it necessary only to wipe off the lymph and close the cavity without drainage, but where there seems to be excessive fluid, I drain, this can best be done by means of a small rubber covered drain, or fenestrated glass tube, which can be filled with gauze and removed in twenty-four hours; this can be removed with greater ease and less pain perhaps than any other form of drain. Where an abscess and adhesions are found, I try to get the abdominal cavity walled off with gauze towels; I then feel no hesi-

tancy in opening the abscess and carefully absorbing all pus with gauze sponges on holders, separating the adhesion, searching for the appendix, etc. In all such cases, the rubber covered gauze drain is inserted to the most dependent portion of the abscess cavity or preferable a counter opening is made and the drain brought out from the bottom of the abscess cavity, and the original opening closed; we, therefore, get drainage by gravitation.

Of the thirteen suppurating cases, there was two deaths. Of the non-suppurating, all recovered.

The first fatal case was Mr. C., white, male, age about twenty years; he had been sick for four days; was moribund and had general peritonitis and thin pus was diffused through the abdominal cavity; he died a few hours after the operation from peritonitis.

The other case was a large colored man, who had been sick three days, and while there was an abscess, it was walled off, and I was confident that the patient would recover, but he died twenty-four hours later from what I think was odema of the lungs.

There were five cases of hystoectomy, with two deaths.

The contrast is great when compared with the preceding reports, neither of which recorded a death from hystoectomy.

One of these fatal cases was a very large woman, weighing more than three hundred pounds, and was thirty-eight years old; it was a clean case, requiring the removal of the uterus for a fibroid; there was no complication and the abdomen was closed at once; operation did not last over thirty-five or forty minutes; patient did pretty well for twenty-four hours, when she began to become tympanitic, and vomiting began; we were unable to get any movement from the bowels, nor did she pass any gas; her abdomen became distended and her breathing very bad until she died three days after the operation from peritonitis; her temperature reached one hundred and seven before death. There was no autopsy held. I offer no excuse for the death of this patient.

The other case was that of a woman thirty-five years old, whose uterus was removed for advanced carcinoma; she died three days after the operation.

There were fifteen cases in which one, or both ovaries were removed and all recovered. I will say here, that I have never had the bad nervous symptoms to follow the removal of both ovaries, that, we are lead to believe will follow; all the cases are neurotics to begin with, and every case, that has come under my own observation has been benefited by removing both ovaries and thus creating the menopause. I have personally investigated some cases, who were not my patients and who have attributed their nervous condition to the

loss of the ovaries, and have found that the condition was as bad before as after the operation. My own experience has not extended over a sufficient length of time and is not of a sufficient scope to be reckoned on, but I am watching my cases in order to know whether the removal of an ovary or both ovaries is such a bugbear or not. Upon the other hand, I have let conservatism over-ride my better judgment and left an ovary or part of an ovary, where I was satisfied that the patient would be better without either on account of the diseased condition of the ovary or the poorly developed uterus, and I have been compelled to admit that my patient was no better after the operation. I believe that the ovary should never be sacrificed, but where symptoms demand it, and where they cannot be relieved except by the production of a premature menopause, I think that we are justifiable in removing both ovaries.

There was one case of gun-shot wound of the abdomen in which the intestines were punctured. W. B. T., age 24. He was shot three times. The right kidney was punctured by the ball and there was two perforations of the small intestines which were closed by crushing sutures reinforced by limbert sutures. The bleeding from the kidney was not great and was controlled by a gauze drain. He did well for four days, when he became tympanic, and vomiting began which continued until his death, one week from the operation; there was an obstruction formed and just before his death, I opened the intestines which was unusually distended above the obstruction; I inserted a rubber tube into it, through which escaped a quantity of gas and liquid feces and afforded much comfort to the patient. I did this hoping to establish an artificial anus, and I believe I would have succeeded had I not delayed too long.

There was one case of gun-shot wound of the liver; a thirty-eight pistol ball passed through the right lobe of the liver; no other damage was found to any of the organs and the hemorrhage was controlled by packing the liver wound with gauze; the abdomen was closed tight except where this gauze was brought out; he made a quick recovery and left the hospital in two weeks; the drain was removed in three days.

One case of abscess of the liver was operated upon; it was a very large abscess of the right lobe; it was opened and drained and the patient died on the 12th day from exhaustion; he was a colored man, fifty-seven years old.

There was one case of cesarean section; the patient was twenty-eight years old; when I saw her first, she was nearly seven months pregnant and foetus could be made out high up in the fundus with a large fibroid filling the pelvic outlet; the patient at the time gave evi-

dence of sepsis, had chills, fever and sweats; my diagnosis was pregnancy with suppurating fibroid of the neck of the uterus. I had her moved to the hospital at once where I could watch her. Her septic condition grew worse, and I operated on her May 24th. The abdomen was opened, a ligature was placed beneath each ovarian and uterine artery and the round ligaments before any of them were tied; they were all tied as rapidly as possible; the uterus containing the child and the fibroid were removed very rapidly and passed to an assistant, who opened the uterus and extracted the child and attempted to resuscitate it; the child was kept alive four hours; the abdomen was closed without drainage; the mother did well for several days, but died on the 12th day after the operation. I was out of the city and cannot say what she died from.

In the foregoing, I have purposely commented upon the fatal cases only, with a few exceptions.

The cases to recover presented nothing of special interest in a report of this kind.

Summed up, the operations were as follows:

	Operations	Recoveries	Deaths
Cholecystectomy	1	1	..
Ovariectomy	15	15	..
Herniotomy	2	2	..
Nepheropexy	3	3	..
Ectopic pregnancy	1	1	..
Amputation of breast	1	1	..
Gilliam Ferguson operation—Montgomery Modification:			
..	1	1	..
Exploratory Laparotomy:			
Gun-shot wound of the abdomen ...	1	1	..
Gun-shot wound of bowels	1	..	1
Cesarean	1	..	1
Cystotomy for stone	1	1	..
Gun-shot of liver	1	1	..
Abscess of liver	1	..	1
Hysterectomies	5	3	2
Appendisectomies	36	34	2

In some of the cases of appendisectomy, reported appendicitis was not the primary cause for operating, but the abdomen was opened for some other surgical condition, the appendix found diseased and removed.

MODIFICATION OF MILK IN INFANT FEEDING.*

HARRY LEVY, A.B., M.D.

BIRMINGHAM, ALA.

The problem of infant feeding has become one of vital importance within recent years. In our cities, the number of artificially fed infants are steadily increasing; and maternal nursing is becoming the exception, rather than the rule; strenuous society life, the ambition of the high school and college girl, the hard struggle for existence among the poorer classes, play important roles in unfitting the modern young mother to provide for the nutrition of her child as prudent nature has intended.

That the mother's milk is the best possible food for the infant all are agreed upon; therefore it will naturally occur to every thoughtful physician, that any substitute for woman's milk must necessarily be similar in composition to it. In order to successfully imitate nature, we must first learn the composition of woman's milk.

The average sample of woman's milk is made up as follows: Fat 4 per cent., proteid 1.5 per cent., sugar 7 per cent., inorganic salts 0.2 per cent., water 87.3 per cent.

The fats are chiefly neutral fats, and a small proportion of fatty acids. The proteid is mostly lactalbumin and a small part of caesin. The sugar is known as lactose.

In civilized communities cow's milk is practically the only milk available as a substitute for woman's milk. Now what are the elements of which cow's milk is composed? The elements in the latter are the same as those found in human milk. Important differences exist, however, in the relative proportion of these elements in the two milks under discussion.

The analysis of an average sample of cow's milk taken from the common herd cow gives the following: Fat 4 per cent., proteid 3.5 percent, sugar 4.5 per cent., inorganic salts 0.7 per cent., water 87.3 per cent. The total solids then in the two milks are equal. The fats are found in about the same proportion, but here the similarity ends. The proteid in cow's milk is nearly 2 1-2 times that of woman's milk; the sugar only a little over a half of that found in woman's milk; and the salts in cow's milk are nearly four times that of woman's milk. The proteids not only differ quantitatively but also qualitatively. In woman's milk they are in greater part lactalbumin and a small proportion of caesin, whereas in cow's milk the reverse exists; the proteid consisting principally of caesin with but a small part of lactalbumin.

*Read before the Jefferson County Medical Society, February 13, 1906.

It is needless to say that the infant finds caesin more difficult of digestion than the soluble lactalbumin. The chemical reaction of the two milks also differ. Woman's milk is either amphoteric or alkaline, while cow's milk is acid.

Having briefly reviewed the fundamental differences that exist between human and cow's milk, we are in position to discuss a method for modifying the latter so that its composition will approach the former.

There are many methods for modifying milk, but we must choose one that is not only inexpensive but simple. Simplicity is essential, since the tendency to misunderstand and misinterpret the plainest common sense instruction of the physician, is ever prevailing among the intelligent as well as the unintelligent laity.

The first step in the so-called percentage modification of milk, is the preparation of a milk in which the proteid is either 1-3 that of the fat or 1-2 of the fat.

The following is a simple method for obtaining a milk in which the proteid is only 1-3 that of the fat: A bottle of milk is set aside in a cool place for about four hours, then the upper third is taken off. This gives us a milk that is composed approximately as follows: fat 10 per cent., proteid 3 1-3 per cent., sugar 4 1-2 per cent., salts .7 per cent. Now you will observe that no matter how much you dilute this milk with water, the proportion of proteid to fat will remain as one is to three. With this 10 per cent. milk as a basis we can prepare any strength of milk we desire, in which the elements will be in the same proportion to each other as found in human milk. In making up a mixture from this preparation it is convenient to prepare 20 ounces of modified milk. Now if we use two ounces of our 10 per cent milk in the 20 ounce mixture our percentage of fat will be 1, proteid 1-3 of one per cent. For example suppose we wish to prepare 20 ounces of a mixture for a baby one month old. For an infant of such age it would be advisable to have a milk in which the fat is 3 per cent., proteid 1 per cent., sugar 7 per cent. This is made by taking 6 ounces of the 10 per cent. milk, 13 ounces water, one ounce lime water, to which one ounce sugar of milk is added. This will give us the above desired formula. The lime water is added to make the milk alkaline in reactive and to prevent curdling of the caesin in large masses.

Now the 10 per cent. milk is only used as a basis for modifying milk during the first four months of infant life. After the fourth month and until the ninth month we prepare a milk that contains one-half as much proteid as that of fat. This is done by taking the upper half from a quart bottle of milk that has stood in a cool place for several hours. This gives us a milk that contains 7 per cent. fat,

3 1-3 of proteid, and 4 1-2 sugar. To prepare a mixture say for a baby six month old we would use 12 parts of this 7 per cent milk, 7 parts plain boiled water that has been cooled, and one ounce lime water, to which one ounce of milk sugar is added. This would give us a milk in which the fat would be 4 per cent., proteid 2 per cent., sugar 7 per cent., inorganic salts .35 per cent.

After the eighth month cow's milk is modified simply by adding lime water and milk sugar.

In conclusion I wish to emphasize the fact that cow's milk, which is fresh and clean, modified by whatever plan the physician may find it convenient, is the only safe substitute for woman's milk.

We cannot too strongly condemn the numerous proprietary preparations of infant foods in the market. They have destroyed as many if not more of infant lives as the soothing syrups and other patent nostrums recently condemned by this society.

Sometimes in excellent surroundings and with an infant of an extraordinary constitution, one will succeed with condensed milk, Nestler's, or Mellin's food, or even with breakfast bacon and sweet potatoes, but in the great majority of cases this is infanticide pure and simple.

By a close study of infant feeding we can save more lives than can be saved by any other prophylactic measure known to the modern physician.

In behalf of the lives and health of thousands of little innocent babies, I ask you not to rely upon their grandmother or neighbors to properly feed them artificially.

ADDRESS.

By WILLIAM C. WILLIAMS, M.D.

President of the Shelby County Medical Society.

CALERA, ALA.

Gentlemen of the Shelby County Medical Society: As your presiding officer, I have the honor today, of submitting my message for your consideration; and in keeping with custom and our constitutional requirements, this message should be devoted to the objects, interests and business of the Society.

The Society is to be congratulated upon the increased attendance and interest taken in the meetings during the year; but without detracting the least bit from any of the Society's commendable deeds of the past, I wish to call your attention briefly to some conditions that effect our future.

Without my taking time to point out proofs, I think you will all agree with me when I make the assertion that the medical organization of this State (of which our Society is a unit) does not receive the confidence, the sympathy and the support, from the public that it justly merits. Now in order to carry out our work, we need this confidence and support, and we must have it; we deserve it, and the interest and common good of the people would demand that we have it; therefore these questions arise: Why do we not get it? and what can be done to gain it? These are pertinent questions which we should try to answer. We should remember that a great part of our work is reformatory in character, and that the ultimate objects of our organization are philanthropic in the highest degree; and although much has been done up to the present, the character of the work is such that the organization cannot hope to consummate its work—to reach the state of perfection designed for it, and to attain fully the beneficent ends for which it was made, without the full confidence and support of the people.

We have not time to discuss fully all that has been done by the organization that should commend it to the people, but we can get some idea by looking a few years back and comparing conditions then with the present. The older members know, and the younger ones can easily find out, that before and at the time of the organization of the State Medical Association, professional conditions in this State were not only unsatisfactory but in many sections deplorable. The health regulations were in some instances as good as nothing, in some, worse than nothing, and in some, you might say, barbarous; and men were allowed to practice and impose on the public without any regard to educational or professional attainments. The principles of ethics were unknown in many sections, and all sorts of questionable methods were used to get practice. Merit and scientific attainments stood for very little. Comparing those with present conditions you see some wonderful changes have taken place. To what is this general improvement due? Any layman who would give the matter a little study could very easily see where the credit belongs. You all know that these changes have been wrought by the medical organization of the state, and in spite of, more than with the help of the people. The standard of medical education is much higher and the people are protected to a far greater extent from medical ignorance and imposture. The health laws have been greatly improved, and you have just witnessed the saving by them of thousands of dollars, as well as lives, to the state. Not the least thing that has been done by the organization is the inculcation into the profession, of the principles of medical ethics, which is lifting the profession from its past low standard of selfish-

ness, jealousies, rancors, narrowness, antagonism, self-advertisings, infringements and general wrongdoings, to a high plane of professional dignity, in which the members, in their dealings with the public and with each other, are actuated by the highest sense of honor and justice.

Now what is there in all this work that is not for the public good? Who can find the least iota of selfishness in it? If the people could see it as we do they would surely give their support to any and all suggestions we might offer; but they do not. They see, or imagine they see, enough to cause them to distrust us, and even antagonize us.

The good done the public by the health laws advocated by the organization, and the raising the standard of medical education, would seem too apparent to be questioned, but it is; and even the code of ethics is a stumbling block for many. The whole medical organization is often classed, by many, with the trade unions, who organize for more money and shorter hours, and some have a suspicion that the laws regulating practice are mainly in the interest of the regular doctors, and that they use the examining boards to keep out irregulars and those not using their methods. All this is a gross misconception of the nature and objects of our medical organization. Many imagine the code of ethics to be some selfish agreement by which the profession binds itself together to protect its pecuniary interests. Gentlemen, there could not exist a greater misapprehension. The public should know that ethics—medical ethics—all ethics, the same as law, are based on broad abstract principles of justice and equity, which assures equal rights to all, protecting the good and restraining the bad. The people could have no better guarantee that they will receive fairness and justice from the medical profession, than to know that the profession, in its dealings with them, is guided by the principles of ethics promulgated by the American and State Medical Associations.

When all this is considered do not the reasons for this lack appreciation and confidence begin to be apparent? They seem so to me. One reason for some of this distrust and lack of confidence is because there are a few people in the world who are too narrow and too prejudiced to understand how so much patient and self-sacrificing work can be done without some other than mercenary motives. The medical organization of this state, to many, is something too good to be true.

The most important reason, however, and one we may hope to remedy, is because we are unknown and misunderstood by the public. The majority of the people have no conception of the plans, scope and purposes of our organization or the beneficent ends that it seeks. If they did they would be with us and for us: they could not be otherwise.

Gentlemen, the remedy is in our hands. The public must be in-

formed correctly on these matters. It is not my object, however, to discuss means of informing the general public—I believe that will take care of itself in due time; but we have, in the medical profession, a part of the public that needs informing along these lines, and it is to this part of the public that we should first direct our attention. As a general thing, the scope of our work, our objects and plans, are not understood properly by those of the profession not affiliating with us. Now the thing for us to do—the thing that lies nearest our door—the thing for us as a county organization, to do, is to unify and solidify our organization, by bringing into it every legitimate practitioner of the county.

The non-affiliating members of the profession, are, in my opinion, the greatest obstacles now to our future progress. The reason is, that not understanding us, they are often really antagonistic, and the public, who naturally look to the profession for its information, is given a false impression. If these members would remain neutral they would not do so much harm, but they will not do it. If they are not for us they are against us. I have heard of more than one member of the medical profession boasting of the fact that he had nothing to do with medical societies. In various ways, these non-members create false impressions and undo a great deal of the good that we may do. Now if we had all these non-members in the society, where they could learn our methods, they would soon be sympathizing with us and helping us instead of opposing us. Then the organization could go on unhindered with the great work which it has to do.

So here is something to do—here is something practical for us to do—here is an object. Let us bring every legitimate member of the profession into the society, who is not already a member. And when we get them in let us educate them in regard to our plans, and let us inform ourselves, for a lot of us need brushing up on these things. Of course we can enjoy the relation and discussion of cases and many other pleasures of our society without knowing its constitution, but we cannot do our full duty toward carrying out completely the noble purpose for which our society was organized unless we keep ourselves thoroughly informed on these matters, so as to ever be ready to explain our plans to the laity and correct false ideas wherever we find them. I want every doctor in this county who is entitled to practice medicine to be a member of our society. How can we get them in? Some one suggest a plan. If every member would make a suggestion, a plan of procedure might be worked up better than any one of us could furnish. Of course the first essential is to be thoroughly in the notion to do it. This is the most important essential for when we get our mind thoroughly made up we will soon find a plan.

A plan that has been forming in my mind for some time, is for the president to appoint a committee of three who may receive suggestions; and whose duty it shall be to get up a small pamphlet containing our constitution and by-laws together with other information and explaining the work of our medical organization. These pamphlets to be gotten up for the purpose of giving correct information concerning the nature of our society work, and with a view to removing any prejudices that may exist in the minds of non-members and to induce them to become members. The committee to put in such matter as they think best to accomplish the purpose in view. Have about one hundred printed and placed in the hands of our members, and let each member reserve one for himself and study it—it will do him good and increase his interest in society work—then let each member give pamphlets personally, or send with personal letters, to his professional acquaintances who are not members, urging them to read the pamphlet carefully and give it their thoughtful consideration. I believe a concentrated effort along this line will bring in several members on the first round, and then if we keep on hammering we will finally get the others.

Thanking you for having served you as your president, and hoping that our society will make more progress this year than ever before, I leave with you these suggestions for your consideration.

THE PSEUDO-EREMIA OF CHILDHOOD.

Woodbridge Hall Birchmore gives some interesting facts in connection with this condition. The disease is rare and its symptoms misleading. In those cases which came under his immediate notice the diagnosis of uremia had been made by skilful physicians. All the cases began with headache, and chill in the older patients, with spasms and crying fits in the younger ones, followed by a sleep or lethargy sufficiently alarming to require the attendance of a physician. The skin was dusky or bluish in tinge. The pulse averaged fifty-nine, with a temperature of 102.4° F. and 103.2° F. In all the cases the pupils were much contracted. Whatever the diversity of opinion in respect to the cause, the condition of the patient demanded prompt relief. A hypodermic injection of sulphate of atropine to stimulate the respiratory center was at once given, and one of strophanthin, in preference to digitalis, to steady the heart. The breathing improved as soon as the atropine began to take effect. When it was possible, an effervescent saline cathartic was given, the dose being repeated in half an hour if necessary; this was followed in every case first by an evacuation of the bowels, and secondly by a disappearance of all the symptoms within ten hours. There are,

no doubt, many other cases of indigestion or faulty digestion in which the poison which overpowers the respiratory center is produced in sufficient quantity to do serious mischief. The strong resemblance of the symptoms to muscarin poisoning is interesting. The hypodermic syringe is an invaluable aid in the treatment of these cases. Strychnine nitrate, strophanthin, and atropine appear to be the best therapeutic agents. The chief fear is that the respiratory center and the heart may give out.—Medical Record, January 27, 1906.

THE SCHOOL GIRL AND THE "COLLEGE WOMAN."

There is a season in diseases as there is in dress. While menstrual irregularities and disturbances are not markedly influenced by the changing seasons except in so far as they are aggravated by cold and chill, still the reopening of schools and colleges for girls, calls these things to mind strongly, for many of the worst cases are found among school girls and "college women."

In treating these as well as other diseases of women Hayden's Viburnum Compound enjoys an enviable reputation. We have so many young girls arriving at womanhood wonderfully relieved of those agonizing sensations incidental to this critical period, by the administration of this preparation. In painful or delayed menstruation it affords relief and the genuine preparation can be prescribed with an assurance of satisfactory results, but just a word of caution seems needed, for the market is flooded with imitations of Viburnum Compound no one of which at all approaches it in therapeutical worth. Be sure to get the genuine "H. V. C." and not some other preparation said to be "just as good."—Massachusetts Medical Journal.

THE THERAPEUTIC VALUE OF WARM MOIST AIR IN THE TREATMENT OF DISEASES OF CHILDREN.

Theron Wendell Kilmer advocates the use of warm moist air in the treatment of children suffering from croup, bronchitis, asthma, pneumonia, and diphtheria. The moist air may be introduced into the crib or bed of a child under an elevated sheet or blanket, by means of an ordinary croup kettle, or administered by inhalation. After outlining the diseases in which moist air is used as a therapeutic agent, he gives some conditions under which hot dry air may be efficacious. A child suffering from nephritis is placed on a rubber sheet, the white one laid over it, and the covers elevated only sufficiently to admit the heat, which is applied by one of several methods suggested by the writer. He emphasizes its value in the treatment of all rheumatic affections, and has used it with success in sprains.—Medical Record, January 27, 1906.

Society Reports.

Clinical Society of the New York Polyclinic Medical School and Hospital.

Stated meeting held January 8, 1906.

The President, Dr. J. J. MacPhee, in the chair

URETHRAL FISTULA AND PROLAPSED KIDNEY.

Dr. Charles H. Chetwood showed a patient on whom he had operated two years ago for urethritis, and who at the present time had an incomplete fistula. When first examined his symptoms seemed to point toward the urethra and prostate, the latter being about the size of a small orange and very hard. The history indicated a gonorrhoeal infection, and, apparently, a syphilitic abscess of the prostate. The patient urinates every half hour, day and night, and the bladder contains about 12 ounces of residual urine. The appearance of the urine is indicative of kidney pus. Both kidneys are prolapsed and the right one is palpable, enlarged and tender. The interesting feature of the case is the prolapse of both kidneys without any apparent explanation. There is nontuberculous history and none suggestive of kidney disease. The speaker's intention was to drain the prostatic abscess through a perineal incision, examine the bladder through the opening, and possibly catheterize one of the ureters.

SYRINGOMYELIA OR LEPROSY.

Dr. J. A. Bodine presented this patient. She was 21 years of age and her family history was negative. About six years ago she first noticed that she was unable to distinguish the impact of the soles of her feet against the sidewalk and began to have aching pains in her feet and legs. Later, pus formed beneath callous spots on the feet and discharged, leaving sinuses leading down to the metatarsal bones. Rest in bed healed the sinuses, but on resumption of her occupation they reopened. Three years ago her feet began to axillae and in both groins. Pain was also present in her spine from the neck to the coccyx.

She was operated on for the contractures of the feet in 1902. Her general health is now fair. The soles of her feet are covered with multiple perforating ulcers. The discharge is thick, browning in color, and has a peculiar sickening, penetrating odor. There is an abscess under the skin in one thigh and another over the sacrum. There are marked motor and sensory disturbances of the feet and legs. The case was presented for diagnosis, which the speaker thought lay between syringomyelia and leprosy.

Dr. W. B. Pritchard said that he considered this patient an example of syringomyelia presenting the exception in a distribution of symptoms in the lower rather than the upper extremities, though both were involved. The trophic disturbances in the feet with bladder symptoms, scoliosis, and, finally, dissociation sensory phenomena, indicated with fair clearness the diagnosis. It was not a leprous neuritis, as the nerves showed no bulbous enlargement and the skin was quite free from the characteristic plaques. Tabes had been suggested, but there was little in the symptom picture to sustain such a suggestion. Absence of the Argyl-Robertson pupil, the persistence of one knee jerk, with absence of true ataxic gait and characteristic pains were collectively conclusive in negation.

The paper of the evening was read by Dr. Andrew R. Robinson, and was entitled:

THE TREATMENT OF SYPHILIS.

He referred to the different views held on the subject of the treatment of syphilis, and stated that he would endeavor to show that syphilis is a serious disease in a considerable percentage of cases, and especially on account of the tendency after immunity is reached to fatal parasymphilitic affections; that the tendency to these parasymphilides depends as a special predisposing factor upon the dyscrasic condition accruing in the active contagious stage; that the intoxication producing the dyscrasia and leading to immunity often is most severe in the period between the recognition of the primary sore and the appearance of lesions upon the cutaneous surface, and, therefore, that syphilis should be treated actively as soon as a positive diagnosis of the disease is made.

The object of such treatment is to inhibit the life action of

the organism, so that only a small amount, comparatively, of toxin is produced, giving immunity with only a mild dyscrasia, and producing a minimum amount of injury to the tissues and consequently a comparatively slight tendency to parasymphilides or even tertiary lesions. He maintained, also, that in the acute infectious stage it is a rule that the less toxin produced in a given case, the earlier the system acquires the condition of immunity; and in syphilis this is important not only for the individual affected, but also from a social standpoint, as the sooner immunity is obtained the less danger of contagion to others.

An example of early immunity is that acquired by a mother in a case of parental syphilis, when she is not invaded by the syphilitic organisms, but acquires immunity by toxins from the foetus. Under these circumstances the amount of toxins passing to the mother must be small in quantity and therefore the immune condition is acquired in a comparatively short period as compared with the time necessary in acquired syphilis.

Syphilis is a serious disease, not only on account of the liability to fatal parasymphilic affections, as locomotor ataxia, but also on account of its destructive action of the progeny of syphilitic parents when produced during the active stage of the disease, hence the shorter this period exists the fewer syphilitic children are produced.

If the tertiary and parasymphilides depend very greatly or principally upon the severity of the dyscrasia, and this condition upon the amount of intoxication, that is, the amount of toxins produced, and this upon the number and activity of the syphilitic organisms in the system, it follows that in this special parasitic affection the treatment of syphilis must be based upon the microbes, the toxins produced, and the ground of the individual affection. Proper consideration of these three points constitutes the fundamental basis for the best treatment of the disease.

Syphilis is a continuous condition from the time of infection until the last microbe is gone; hence the division of the disease into stages is not scientifically correct, although for clinical description it is of some value.

In the period between the appearance of the primary sore and the so-called secondary stage, represented by cutaneous lesions, the gen-

eral nutrition of the person is lowered, fever is present in varying degree, the red-blood corpuscles are diminished in number, the lymph glands throughout the body may be affected, the spleen swollen and tender, liver enlarged and the nervous system injured, as shown by the presence of neuralgia, headache, lassitude, pains in the joints, bones, and periosteum, and occasionally by an extensive multiform erythematous eruption. This shows that before secondary lesions occur upon the skin there may be intoxication of the general system, which leaves its impress on the tissues and acts as the main disposing factor in the causation of parasyphilides. If this be true, it follows that treatment should be commenced in every case as soon as a positive diagnosis is made, and if this is done at a stage before cutaneous lesions appear, so much the better for the patient.

Existing lesions in the secondary stage are treated to lessen danger of contagion, remove deformity and save tissue but surely it is better, more philosophical, to prevent the formation of lesions, especially as they are hot-beds for toxin formations, than to wait until they are formed and danger has occurred. The treatment of syphilis should be offensive, not defensive. Keep the disease in as quiescent a state as possible by inhibiting the life action of the organism; prevent contagion from lesion formation; promote the elimination of the toxins as quickly and completely as possible, and pay attention to the general nutrition of the patient. This constitutes the correct treatment of syphilis according to our present knowledge.

Mercury is the only agent that acts upon the microbe, hence it should be given during the entire microbic stage in such manner as to secure the best action. Iodid of potassium should be given only as an aid to the mercury or as an alternative in later stages and at all times when tertiary lesions are present. It is rarely indicated during the first six months of the disease, and never during the microbic stage, as the only agent.

Against the parasyphilides one should produce a proper degree of alkalinity of the system, advise avoidance of everything that causes circulatory disturbances and of things that interfere with tissue metabolism, especially alcohol, local irritating agents, etc.

Dr. E. L. Keyes, Jr., opened the discussion of this paper. He

said that while he agreed with all the conclusions reached therein, he disagreed wholly with all the premises. Briefly, in his opinion, the way to treat syphilis is as a disease and not as an array of symptoms. The most practical method is to settle on one's mind the amount of medicine considered necessary in all cases to overcome the disease. One grain of iodide of mercury every day for three years will conquer it, and even though the skin lesions have disappeared, together with the mucous patches in the throat and all other outward manifestations, the physician should still try to live up to his ideal of the amount of mercury or iodid that should be taken by the patient, whether he stands it well or not. He disagreed absolutely with the speaker regarding the method of treatment at the beginning of syphilis. It is extremely dangerous to proclaim that syphilis should be treated before the appearance of a cutaneous lesion, because, in a very fair proportion of cases, one is unable to make a positive diagnosis until the appearance of the secondary lesions. Theoretically, if it is proved that the existence of the spirocheta pallida is conclusive of syphilis, treatment may begin as soon as it is recognized, but until this is possible, it is wiser to wait for secondary evidence. He recalled two instances in which patients who had presented themselves for treatment within twelve hours of the supposed inoculation had developed a chancre six weeks later.

Dr. Charles H. Chetwood said that there seems to be a general tendency at the present time to question whether syphilis should be treated in the primary or in the secondary stage. The reader of the paper had emphasized the point that the question is not when to treat it, but that it should be treated when the diagnosis has been made. For his part, he had always treated it when the secondary eruptions appeared, and had considered it a safe procedure. He would not advise commencing treatment earlier unless the presence of the disease would be positively substantiated by the spirocheta pallida or some other germ. He treats all cases according to the general exigencies of each individual condition, and the results have been most satisfactory.

Dr. J. H. Abraham said that next to the dermatologist and the genito-urinary surgeon, the nose and throat specialist sees as many cases of syphilis as any of the specialists. They rarely see any primary

syphilis, but many secondary and tertiary cases come to their notice. Personally, he had seen five cases. One patient had the initial lesion on the lip and the other four on the tonsils, and in one case the upper respiratory glands showed marked symptoms of intoxication. Another marked feature is the enlargement of the leucic glands. He agreed with the principles laid down by the reader of the paper for the treatment of primary syphilis. Secondary syphilis of the larynx should be treated entirely by personal rule. He relies upon one drug, carbolic acid. An application of 10 per cent. chromic acid to the larynx gives rise to practically no pain and accomplishes the desired result. If the patient is given a sufficient amount of mercury for a long enough period of time, he is less liable to require the iodids or to suffer from a marked tertiary form later. He has never found it necessary to give more than 75 or 80 grains of the iodid at one dose, and always begins with 5 grains and increases one grain daily or every other day. The absorption occurs as desired and the digestive tract is not disturbed.

Dr. R. H. M. Dawbarn said that he believes the wisest course is to begin treatment of syphilis as soon as one is sure of the character of the lesion. He did not agree with the statement that the iodids of potassium have no direct bearing upon the foundation of syphilis. In his opinion, over eating and over drinking may so change the metabolism of the human system as to render the effects of syphilis more intoxicating.

Dr. J. A. Bodine said that the time to begin treatment depends greatly on the character of the patient. The primary duty of the physician is to effect a cure. If the patient is a highly intelligent one, the treatment may begin as soon as the diagnosis is positively made, as that character of patient may be depended upon to carry the treatment through to its logical conclusion. With a more ignorant patient, it is often necessary to first convince him that he is a victim of this disease in order to impress upon him the necessity for systematic and long-continued treatment, and in this case the appearance of the skin eruption following the sore convinces him that he has syphilis.

Dr. Robinson closed the discussion by saying that he still thought the treatment should be begun, if possible, during the first stage of the disease. If the patient presents what he considers the initial lesion, he recommends a six weeks' course of treatment with mercury, and if, at the end of that time, there remains any question as to the diagnosis, it is very easy to bring out a small lesion as convincing proof.

GALL STONES.

Morison (Edinburgh Monthly Journal, October, 1905) notes the following facts: That gall stones may be present and cause in an uninfamed gall bladder no symptoms. Cholecystitis is the necessary irritant. If symptoms have once occurred they usually recur. Gall stone attacks are exceedingly painful, because when cholecystitis is present, the efforts of the gall bladder are to expel its contents. Serious symptoms are usually due to stones which are in the ducts. Repeated attempts on the part of the unstriated muscle of the gall bladder to expel its contents lead to its hypertrophy. If these attempts are unsuccessful inflammation and degeneration of the organ result, possibly gangrene and rupture, the latter resulting from tension. Pancreatitis may simulate gall stone disease and make a diagnosis impossible. The general condition in acute gall stone disease is that produced by acute septicoemia, and is caused by infectious germs. The gall bladder may contain bile, pus, or clear mucoid fluid. Spontaneous cures sometimes occur, but one is more likely to meet with fibroid thickening of the bladder, ulceration of the ducts, abscess of the liver, and other serious conditions. The treatment of this disease is surgical at the earliest possible moment.

When performing amputation, arthrectomy, osteotomy or similar operation it is wiser to leave the constrictor in place until the dressing is partly, or entirely, applied, than to remove it after tying the large vessels, in an effort to secure the small ones. In the former case the snugly applied dressing will safely prevent hemorrhage; in the latter case, there may be an alarming loss of blood from the numerous small vessels in the very time the efforts are made to tie them all.—American Journal of Surgery.

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The Medical Library Association of Birmingham.

This announcement is published that the members of the Birmingham profession and our other friends may have some knowledge of the objects and achievements of the Medical Library Association of Birmingham, and also to those among us who are not already members it is directed as an invitation.

The first home of the library was, during May and June, 1904, over Jacobs' Drug store in a room the free use of which Mr. Jacobs kindly gave. Soon the Woodward Construction Company generously offering more commodious quarters, and the library was moved to the room it now occupies adjoining the law library on the second floor in the First National Bank Building. The situation is an exceptionally happy one in this large, well lighted, quiet room, both the medical and the law libraries being presided over by a very competent librarian. A telephone has recently been installed, adding greatly to the comfort of the members.

The organizers of the Medical Library Association had in view the future even more than the present good of such an organization, realizing that the library must in the beginning consist chiefly of current literature and be small and of limited benefit to its members, but believed that it could be added to little by little and that as the current literature of each year was carefully preserved and bound, in time to come it would furnish a valuable source for reference.

But thanks to the energy and enthusiasm of some of its members, far more than was expected has already been realized.

All of the good and most of the doubtful among medical periodicals, including everything worthy of notice in current literature, was subscribed for. As each volume is completed it is bound and placed on the book-shelves.

The Association was especially desirous of becoming a member of the Association of Medical Libraries, but at first it could not qualify because the library did not number sufficient volumes. Finally, through the efforts of the president, a gift of over five hundred volumes was made to us by the Association which we wished to join, thus enabling us to meet the requirements of that body. This collection of books contains much valuable literature, among which are the complete files of several of the best periodicals.

This nucleus has been and is rapidly being added to, the library at present consisting of over seven hundred volumes. Many of the members have donated or loaned valuable works, and it might be added that it is the history of such loaned books that the original owner never requests that they be returned. It must not be inferred because all of the books were donated or loaned that they are old and valueless, but on the contrary it is far the most complete collection of recent medical literature in the State.

In regard to the use of the library, it is open all day, and although the books are not allowed to be taken from the rooms, the latter are quiet and comfortable for reading. All of the current literature is properly arranged and cared for by the librarian so that any periodical can be immediately referred to.

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Correspondence.

A Visit to Insane Asylum at Tuscaloosa.

In this impromptu article it shall be the endeavor of the writer to briefly relate the happenings of a day—aside from the routine college duties.

Dr. Wyman, whom we all admire as a man, recognize as a scholar, praise as an instructor and honor as a physician, in his zeal for the interest of the student body and the welfare of the Birmingham Medical College never allows an opportunity to pass unimproved. With him nothing is too good for the boys.

So for the past three years it has been the custom of our Dean to augment his course on neurology with a clinic at the Bryce Insane Asylum. This clinic is primarily for the benefit of the Senior class, but neither student nor professor is excluded.

As a consequence, on the second day of February, no less than thirty students joined Dr. Wyman at the station and boarded the train for the "City of Oaks." The day was ideal, all nature seemed in tune, winter had apparently borrowed the day from spring for this special occasion.

At fifteen minutes past nine o'clock we reached our destination. We were ushered into a spacious waiting room, where, in a short while, we were introduced to Dr. Searcy and his splendid corps of assistant physicians. We beheld in the supervisor of this great institution a great and good man. We saw the marks of intellectual power in his every feature; his very bearing denoted marked executive ability; his kind words bespoke a tender heart, and his humor betrayed a genial disposition—a noble character engaged in a noble work!

Our party was divided into small groups, each group being led by Drs. Searcy, Wyman and the house physicians respectively. Thus arranged we proceeded to visit the different wards. We first entered the "Reception Ward" as we were informed it was where the patients are kept upon their arrival until a diagnosis is made as to the type of

insanity each represents, then they are distributed to the wards containing the class to which they belong.

We next passed on to the "Sick Ward" which is for the benefit of those who contract disease while in the Asylum. It was nicely arranged and the sick received the very best of attention and treatment.

The scene shifted again and we found ourselves in the ward of "Terminal Dements." As one might suppose we here saw the greatest number of patients, embracing many types of dementia, and, as the name of the ward indicates all beyond hope of recovery. Occasionally we would pause while our guide explained the different cases of marked interest. Thus far we had only gone through the men's department.

We were next conducted into a spacious dining hall, the largest we had ever seen. We were told that more than eleven hundred people ate there at one time, consuming five barrels of flour each day. Also in this connection we learned that from five to seven hundred pounds of meat was butchered there each day and that the dairy furnished about two hundred gallons of milk daily besides the vegetables raised on the farm. And that the labor required in producing this income was obtained from that class of patients who were physically strong enough to work. From two to three hundred men and women are engaged each day at some such occupation. Dr. Searcy stated to us that the best treatment for insanity was to keep the patient busy at some kind of work. So we see that under such a system the Institution is to a great extent self-supporting.

We were next shown through the culinary department where we saw the most modern and elaborate appliances for preparing food for more than twelve hundred people. We then left the main building to visit an adjacent one. This building contained the wards of the Paranoiac, Epileptic and Tubercular patients respectively. We next came to the laundry which was modern in every detail doing first class work for the whole institution.

From here we returned to the main building where we visited the drug dispensary; the library in which is kept a complete history of each patient who enters the asylum, and the museum, containing different articles made by the patients consisting of carriages, paint-

ings and fancy work of all kinds and descriptions. Next we came to the women's department of the main building. Here we found the wards arranged in a manner similar to the men's department, each one adding interest to our visit.

Having gone through the different wards we were conducted, it being eleven thirty o'clock, into the class room where Dr. Searcy gave us an interesting and instructive lecture on the subject of insanity. Using his own classification he in a general way covered the entire subject. We enjoyed it very much and wished we had had time to have listened to a detailed lecture on the different types, which, in so short a time, he could merely mention. At this juncture lunch was announced and we were invited into a room arranged for the occasion where we found three large tables fairly groaning under a most delicious and substantial repast. Suffice it to say that this was enjoyed as only a crowd of college boys can enjoy such function. It was one o'clock when we finished lunch and Dr. Searcy announced that he would hold a special clinic at one-thirty so we had a half hour in which to enjoy an after-dinner smoke and think over and talk about what we had seen. As a whole it had proven a complete revelation to us. We were ushered, as it was, from a world of sunshine and happiness where we could enjoy and appreciate the beautiful, the true and the good into a world of mental chaos where this sense of appreciation had taken its flight—in some instances for a season only in others, forever—leaving darkness and despair fast in its wake. We were made to fully realize the blessing of a clear mentality. We were brought into greater sympathy with unfortunate humanity; resolving in future as men and physicians, by our lives, influence, and efforts, to preserve and elevate the minds of those with whom we come in contact. We feel a greater pride in this grand old State of ours because of the material way in which she provides for the comfort and welfare of her unfortunate offspring. Alabama should feel blessed and highly honored in having such an able man as Dr. Searcy has proven himself to be to supervise this great institution of hers. For if anything impressed us more than another it was the wonderful systematic way in which each department was conducted and the strict discipline which pervaded the entire institution.

Here our reflections were interrupted by the announcement that it was time for the clinic. We assembled in the class room, and had brought before us classes consisting of from six to eight patients each, representing the various types of insanity. The house physicians gave a short lecture as they presented the different classes to us, bringing out the points characteristic of each type, also demonstrating the stages of each kind by the members of each class. This was the most interesting event of our visit and we were sorry when the last class was dismissed. This completed the programme for the day at the asylum.

We had received such a cordial welcome and had been shown so many kind attentions at the hands of Dr. Searcy and his assistants that it made our hearts sad when we bade them "good-bye."

Thanks to Dr. Wyman for this great trip the memory of which shall ever be cherished among the most pleasant reminiscences of our college days.

A Student.

MEDICAL TREATMENT OF APPENDICITIS.

Mossbrugger (*Munchener medicinische Wochenschrift*) has attained excellent results in both the acute and chronic forms of appendicitis by collargolum. In mild cases where there have been colicky pains and irregularity of the bowels, tenderness on pressure, but without abdominal distention, he applies flax-seed poultices and gives a tablespoonful of a solution of 15 grains of collargolum in six ounces of water. The dose is repeated every half-hour to an hour. In more advanced cases the dose of the remedy is doubled, and unguentum Crede is rubbed into the abdomen. In early cases there is prompt improvements in the symptoms, but in those farther advanced persistence in the treatment is required for a week. Many cases that are apparently hopeless are relieved by the energetic employment of the drug. In his series of seventy cases only two ended fatally, and in both diffuse peritonitis had set in before treatment was instituted. The author says that the result of treatment justifies a favorable prognosis in cases which have not progressed to general involvement of the peritoneum, and in which general profound infection has not taken place. If the disease has just begun the collargolum treatment is quite as effectual as appendectomy. Even in cases of abscess there is no necessity of urging early operation, as under this treatment infection becomes walled off, and there is less liability of infecting the general peritoneum when the operation is undertaken.

Selected Articles.

THE PHYSIOLOGICAL AND LEGAL STATUS OF THE FETUS IN UTERO.*

By W. H. SANDERS, M.D.

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MONTGOMERY, ALA.

The two most important events connected with a life-history are its beginning and ending.

Embryology has persistently sought to discover and to interpret the earliest manifestations of the former, while pathology, with equal tenacity of purpose, has endeavored to ascertain the causes and incidents of the latter. So far as the beginning of a life-cycle is concerned, embryology has thoroughly established the doctrines of gamogenesis and agamogenesis, the former being the rule among the higher orders of plants and animals, the latter among the lower orders. Reproduction among human beings must, therefore, obey the law of gamogenesis; hence, two ancestors—male and female—contribute to the origin of every new member of the human race, the contributing elements being spermatozoon and ovum, respectively.

While these germ-cells possess inherent vitality and motor power, especially the spermatozoon, neither one can separately and alone evolve itself into a higher or more complex morphologic entity. Put the two together, however, under favorable conditions, and a new unit results, one capable, under proper environments, of evolving itself into a fully-developed human being, that is, the new unit represents all of the potentialities of which the future adult becomes the outward and visible expression.

In contributing the germs they respectively furnish; the male and female have done all they can do toward the creation of the new unit and toward its endowment with physiologic and psychologic functions similar to their own. From that time forth the new being, possessing all of the attributes of living bioplasm—motion, absorption, sensation, and fission, or multiplication—must be the architect and builder of its own body. True, for nine months the female performs the essential and hospitable function of hostess, and generously supplies the young, and presumably welcome, guest with oxygen, inhal-

*Read in the Section on Obstetrics and Diseases of Women of the American Medical Association at the Fifty-sixth Annual Session, July, 1905.

ed through her own lungs; with food, elaborated in her own digestive system, and with warmth supplied by her own blood, but in fulfilling these high functions she is simply furnishing the material, the brick and mortar, so to speak, out of which the young builder must erect its own corporeal superstructure.

In the work going on, the part played by the female corresponds with the office of brick and mortar carrier, that by the young builder, with the office of skilled artisan, who takes hold of the materials brought and puts them together in the shape and form of a human body. The new being as it grows and develops is not the passive result of work done by the physiologic forces of the female, but is an autochthon, using, however, very refined material furnished by the hostess. The principle is precisely the same as one that prevails in social life. A hostess places dishes, delicious and wholesome, before her guests, but is powerless to force them to partake thereof; they must, by their own volition, take hold of and appropriate the food brought within their reach.

Science does not forbid, on the contrary justifies, the belief that, could the fertilized ovum, before it has formed attachments to the womb in which it receives its fertilization, be transferred without violence to another womb in a similar condition to the first, its career of growth and development might proceed undisturbed. Indeed, could the transfer be made to an artificial womb, or incubator, in which the conditions were identical with those of the natural womb, its growth and development might still proceed undisturbed. The conjunction of spermatozoon and ovum, must therefore, be a great biologic event, one that endows the newly-formed unit with physiologic attributes; indeed, makes it, in a qualified sense, an independent human being. Although the powers of this new being are feeble, its potentialities are great, the evolvement of which constitutes the growth, development, and achievements of its life-history.

The cardinal postulate I desire to emphasize is that the vitality, the life-force, and the physiologic functions of the new being reside within itself and not in the hostess. As has been said, the latter sends blood to the fetus, freighted with food and air, but she is powerless to force it to accept either; the new being eats because it is hungry and breathes because it feels the need of oxygen, both acts being vital efforts of its own. Soon after receiving its endowment of physiologic functions the new comer settles down in its velvety and temporary home, prepared by the proliferating lining of the maternal womb, and dominated by an instinct, yea, an intelligence, coeval with its own corporeal origin, proceeds to differentiate itself into bone, sinew, tendon, muscle, blood vessels, viscera, brain, and nerve, and with the

skill of a consummate artist fashions these in miniature of an adult human being, the highest type of animal life. The fetus performs these physiologic functions by virtue of its own vitality and power, originally derived, it is true, from the two parental germs, but when these have been consolidated into a new unit—a tertium quid—a self-acting and, in a qualified sense, a self-sustaining human being has been created.

At the end of nine months the silent and unseen artist has filled his temporary home with his living self, whereon the hostess by means of forces marvelously scientific and practical ushers him into the outside world as a plump and rosy baby. When was that baby born, a few minutes ago or nine months ago? Science and logic give one and the same answer. If birth means the act of coming into life, as the dictionaries tell us, unquestionably the baby under discussion came into life nine months ago, and at the end of that period simply changed its domicile. Why not, then, abolish the term conception, which is liable to be more or less misleading and confusing, especially to the lay mind, and substitute for it the more scientific and correct term, birth? This done, then, the one term, delivery, either premature or at full term, would adequately express the transition of the child from intrauterine to extrauterine life. Besides, the adoption of this nomenclature would help to clarify the entire subject of fetal life and would lead to the enunciation of definite, inflexible, and absolutely correct principles of jurisdiction applying thereto. If the baby in question is a living human being when delivered, was it not a living human being the day before, the month before, six months before, eight months and twenty-seven days before? Can a point of time betwixt conjunction of the parental cells and the delivery of the child be fixed before which it did not possess the nature of a human being and after which it did possess the nature of a human being? Did its nature undergo any change between the time at which conjunction of the male and female germs occurred and that at which the baby appeared in the outside world? Was not the nature of the baby the same from the beginning to the ending of its uterine life? Was it not from first to last simply a question of the growth and development of one and the same being, and after the completion of the period of uterine life will it not continue to be a question of the growth and development of one and the same being up to physical maturity?

With these questions answered in the affirmative, as they must be, we are forced to concede that when in the red-hot furnace of congeniality two germs—male and female—are brought together that fuse themselves into one, a new being, crowned with humanity and mentality, comes into life. If this be true, does not the new being, from

the first day of its uterine life, acquire a legal and moral status that entitles it to the same protection as that guaranteed to human beings in extra-uterine life? Indeed, should it not receive greater protection, for the reason that to the nature of a human being it adds the condition of utter helplessness, a condition that should appeal in mute, but sublime eloquence to the manhood, the womanhood, and above all, to the motherhood, of those who can shield and protect it? Lives there a man or woman who would assault and slay a little, laughing, prattling babe? If that be a crime from which the coldest-blooded villain would recoil, how much more a crime to assault and slay an innocent babe quietly sleeping in what should be an impregnable fortress—a babe whose voice is hushed and can not be raised in piteous cry for mercy or for help!

Objection to the use of the terms, birth and delivery, in the senses suggested, might be raised on several grounds: First, that it would involve the date of every birth in more or less uncertainty; secondly, that the fact of a birth could not be certainly known for four or five months after it had occurred; thirdly, that no practical benefit would result from the adoption of the proposed nomenclature. Admit that these objections are entitled to more or less weight, yet, when compared with the advantages that would accrue from the change of nomenclature proposed, the objections dwindled into insignificance. A simple formulation of the advantages will be sufficient to force conviction of the utility of the proposed nomenclature:

1. It would be essentially and scientifically correct to locate birth where and when it actually occurs, in spite of the fact that several months would usually elapse before it could be known that a birth had certainly taken place.

2. It would place a pregnancy, from the first day of its probable occurrence to its termination, on the high legal and moral grounds it deserves to occupy.

3. It would dignify the position of the foetus in utero, and would establish beyond all doubt or confusion the right of the fetus to the same protection, moral and legal, as is accorded to human beings who have completed the period of their uterine existences.

4. It would unify the terms, fluxion, abortion, and miscarriages, under the one term, premature delivery; then, two expressions, premature delivery and delivery at full term, would cover the entire subject.

5. It would enable lawmakers to enact clear and definite laws for the protection of the foetus in utero, which laws, jurists and juries could administer without doubt or confusion.

6. It would have a strong tendency to promote virtue and to

prevent crime, and to build up in every community a positive demand for the protection of human life at its tenderest and most helpless period; it would tend to educate the people on a subject in reference to which they stand in great need of education and would thereby save the lives of many innocent and undelivered babes.

If the argument thus far be sound and tenable, does not the legal status of the fetus become clear and fixed? It is not strange that before science had ascertained the steps and stages of reproduction the law providing for the protection of the fetus should have been inadequate, but after these steps and stages became definitely established no inadequacy on this point should have prevailed. The common law is conspicuously defective in its provisions for the protection of the fetus. The following quotations on this point are made from the American and English Encyclopedia of law: "According to some authorities, it never was an act punishable at common law to commit abortion with the consent of the mother, provided it was done before the child became quick; but others are not disposed to restrict the criminal act, and hold that it may be committed at any stage of pregnancy. If the abortion was committed after quickening, it was punishable only as a misdemeanor. If done without the woman's consent, the act was held to constitute an aggravated assault."

'Inasmuch as the common law was wholly inadequate for the protection of the fetus it became imperative that this defect should be supplied by statute law. Quoting from the same authority cited above, it is gratifying to find the following statement: "The statutes enacted on this subject in most of the states fail to draw any distinction between the commission of the offense, or attempt at commission, before and after the quickening of the child in the womb, making it a felony in either case. But some states still retain the distinction, punishing the act or attempt more severely when done after quickening. In Michigan it is essential that the child be quickened. The means denounced by the various statutes are the unlawful or malicious supplying, or administering to a pregnant woman, or causing or procuring to be taken by her, any drug, poison, substance or noxious thing, or unlawfully using or causing to be used any instrument or other method whatsoever, with intent to procure or cause an abortion."

The statutes on this subject recognize the right of a physician to produce an abortion in the interest of the mother. The question arises: Should this right be exercised? Without undertaking to discuss the various conditions under which the exercise of this right might be considered, the broad proposition is laid down that the occasions on which it would become imperative to sacrifice the life of the child to save that of the mother are extremely rare. With the

two great resources of rectal alimentation and Cesarean section at command, it is believed that practically every pregnancy can be safely carried to a point at which the life of the child may be saved. The methods and means of maintaining nutrition by rectal alimentation have been so perfected that the production of abortion, or of premature delivery, for gravid nausea should rarely or never be required. At all events, by this resource the woman ought to be carried to the point of certain viability of the child before premature delivery is resorted to. For deformed pelvis surgery, with its tremendous advances in skill and technic, offers in Cesarean section a resource for saving the life of the child, and at the same time of jeopardizing to such a small degree that of the mother, that it should be universally employed in such cases. Dr. L. L. Hill, a surgeon of distinction in my state, and fully informed on these questions, furnished me recently the following statistics applying to Cesarean section: "1. Zweifel performed 76 Cesarean sections with 1 death. (J. Whitridge Williams, professor of obstetrics in the Johns Hopkins University, 1903.) 2. In 1903 J. Whitridge Williams collected the reports of 335 cases of Cesarean section by various operators, with a mortality of 6.87 per cent. 3. Not a single death of a mother occurred in 11 Cesarean sections recently performed at Johns Hopkins Hospital. 4. The mortality in Cesarean section should be about the same as that resulting from operations for simple ovarian tumor."

Without pursuing this discussion further, I submit to this Section the following propositions, and invite an expression of judgment thereon, not only by the individual members, but by the body:

1. The conjunction of male and female germs constitutes, from a scientific standpoint, birth.

2. The term conception should be abolished and that of birth substituted therefor.

3. In dealing with all stages of pregnancy, even the earliest, physicians should realize the extreme gravity of the condition, and should never condemn to death a fetus, however young, without the maturest consideration, and without calling to their aid the highest professional authority within reach; in a word, without carrying the case to the nearest and wisest medical supreme court accessible.

4. The principles herein contended for should be impressed on the members of the profession, taught to medical students and promulgated widely among the people.

5. Medical men should interest themselves to see that the statutes of their respective states are ample for the protection of the fetus in utero.

DISCUSSION.

Dr. H. O. Marcy, Boston, said that his opinions correspond with those of Dr. Sanders. He believes that the conclusions should be emphasized most positively. A physician may induce an abortion because he believes that the life of the mother is more valuable than the life of the fetus, but he should try to conserve the life of both to the best of his ability.

Dr. W. H. Sanders declared that it was not stated in the paper that abortion should never be brought about, but that it should be the result of very mature consideration and after consultation with the highest and wisest and most experienced authorities within reach.—*Journal of A. M. A.*, Feb. 24, 1906.

GONORRHEA AND SOME OF ITS RESULTS.*

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ATLANTA, GA.

Gentlemen: Before beginning our regular course I desire to present to you a few facts which I have taken some pains to collect, to show you from the start the importance of gonorrhea as a causative factor of many diseases not only in this branch, but all through your medical course and in your practice in after-life.

Of course it is natural for every professor and lecturer to think that his own branch is one of the most important. I believe though if you will consider carefully the facts I have collected to show the far-reaching effect of gonorrhea, you will be willing to admit that the time you devote to this subject will not be entirely misspent.

I also will touch briefly upon a few points as to the education of the public, and especially the young men in regard to the dangers and the methods of prophylaxis.

So common is gonorrhea and so mild are many of the cases, that not only the laity, but a large per cent. of physicians and surgeons have developed an indifference that is almost criminal.

Neisser holds that gonorrhea, with perhaps the exception of measles, is the most widespread of all diseases (1). Morrow asserts that it is even a more potent factor of depopulation than syphilis, and that a large per cent. of involuntary childlessness is due to it.

He also thinks the extent to which gonorrhea prevails in private life is much greater than is generally supposed, and makes the startling statement that there is more infection among virtuous

*Opening lecture at the Atlanta School of Medicine.

wives than in professional prostitutes. The truth of this statement becomes more reconcilable when one considers how much larger is the number of virtuous wives than is the number of prostitutes, and that "powerful motives lead to their concealment." Unfortunately the mildness of many cases gives the patient a false sense of the gravity of his condition, if neglected, and his suffering is rarely sufficient punishment for his sin, until some complication follows, or he desires to marry, but can not, because of the uncertainty with which he is harassed, not only on account of the danger of infecting an innocent woman, but also as to his future health and potency. Many of these cases become utterly miserable neurasthenics from the profound mental impression made by the disease affecting the sexual organs, for next to a man's love of life comes that of procreation, and his sexual instinct, which "is given to man for two reasons, to perpetuate the species and to rivet the tie between husband and wife by mutual endearment" (2). Is, then, his mental anguish unnatural?

This is only the history of a certain class; others are apparently cured and of their own accord, or upon the advice of a careless physician, who gives his consent after merely inquiring as to the general symptoms and the discharge, the patient then marries a pure woman "only to deposit in her lap—as a wedding gift from his first wife, the prostitute—the seeds of a foul disease which makes her innocent wifehood a source of pain and misery, and often renders motherhood impossible. The prostitute takes a poetic revenge, and by the disease she gives her paramour forever seals the fountain of nature and restrains her supplanter from acting beyond her own (the prostitute's) sphere, even though she be a thousand times legalized as a wife by church and court" (3).

Is it right to treat so serious a matter as a joke? Should not a young man early in his youth receive a certain amount of education upon such an important subject and one with such disastrous possibilities? Ought this part of the education of a son be left to the servants or his ignorant (and perhaps profligate) companions, who little realize the dangerous pitfalls even if they themselves have fallen therein?

A father can not ease his conscience by thinking his son will not yield to the temptation or will come out unscathed. With the plain fact staring him in the face, that 80 per cent. of men contract gonorrhea, the sophistry of such reasoning is evident. The time to educate is before the disease is contracted, for then if a competent and conscientious surgeon takes charge of him, his one-sided education will be completed, but think what a price to pay! Consider the moral degradation, the physical weakness and the mental

changes that have been wrought as chains of iron to handicap his career and perhaps wreck his life. It is not claimed that education will create an Utopia, but fear of impending danger would certainly save many from the maelstrom of venereal diseases if they were only shown the dangers in time. This education in addition to warning as to the peril should also encourage and even urge the young man that continence is not incompatible with perfect health. The double code of moral laws is to be condemned, whereby a man may sin without offending society, and yet the same sin means the woman's ruin. I do not advocate lowering the standard for women, but raising it for men.

Morrow says thousands of young women suffer moral and physical shipwreck from ignorance of the fact that loss of virtue often carries with it the loss of health. "The vast majority of men who carry disease and death into their families do so ignorantly" (4). Undoubtedly many disasters in married life and untold suffering could be averted if the patients were properly advised even after they have contracted the disease. Who is to blame in these cases? Most assuredly the physician, who is almost always insufficiently trained in the methods of determining whether or not a patient can marry with impunity. This should be a standing question in all examinations in surgery, not only in the medical colleges, but also in the State board examinations, and in this way compel the student and physician to be prepared upon this subject. I assert no question could be asked that would be more practical, nor one that will be of more value in preventing sterility, disease, suffering and death.

Gonorrhea is the most amenable of venereal diseases to individual prophylaxis, and yet one hesitates at first to advocate any method which might perhaps increase the evil by lessening the danger which undoubtedly is a great conservator of social purity. When, however, we consider that the social evil has existed through all ages, and that all attempts at suppression have failed, from the rigid laws of Maria Theresa at Vienna and the Popes at Rome (5), down to the present day, and have invariably increased the numbers of the clandestine prostitutes (who is always more dangerous), that control measures have been equally as inefficient as those directed toward suppression, that all history and knowledge of human nature have shown that prostitution can not be suppressed, and as venereal diseases are the worst results, it follows then that efforts must be directed toward protection from these dangers, in behalf of the wife and the State as well as the sinner, if he insists upon exposing himself. Explain to him that there is always danger and urge continence, but also advise him as to prophylactic measures, in case he exposes himself.

which, it is sad to relate, will be of frequent occurrence. If he will not reform we are justified in behalf of an innocent wife to protect her and their offspring.

The use of the condom greatly lessens the danger of gonorrhea, but it may rupture during coitus. Good results also follow injections of 10 per cent. argyrol after urinating and thoroughly washing the penis. The region of the meatus should be smeared with the same solution to kill any gonococci outside, while if the injection is properly given and retained five minutes the germs in the anterior urethra are destroyed. There is, however, always the danger of syphilis and a chancre which must be impressed upon the patient.

Other important sociological problems are to be considered in attempting any method preventing venereal diseases; the regulation of sexes in industrial life; the low wages received by working women; the more rigorous attempts to control abortions; and efforts to segregate the prostitutes in certain sections of the cities and leave them there undisturbed in order to lessen the number of the more dangerous clandestines. I regret that it is not within the province of this lecture to enter into the details of these subjects.

To show further the necessity of devoting more time and attention to this widespread though insidious disease that stalks through every nation, causing untold suffering, and making invalids of strong women, let us consider briefly some of its various phases:

1. The Monetary Loss.—So enormous are the figures and so meager and unreliable are the statistics, that I will ask you to make a mental calculation for yourself and estimate about the average cost of an average patient for necessary expenses incident to the disease, and to that add the loss of time, the loss in business from physical weakness and mental worry, and the loss to the nation from lessened capacity for production. Eighty per cent. is the usual estimate of the men who have gonorrhea (6). According to the U. S. census 1900, there are about 20,000,000 men in these United States between 20 and 50 years of age. Eighty per cent. of this number is 16,000,000. Now multiply this by the average loss of each patient to himself and the State, and the quotient will show part of the monetary loss from gonorrhea alone.

2. Invalidism and Operations in Women.—It is under this head that we see the appalling results of gonorrhea. Humiston and Price claim from 90 to 95 per cent. of abdominal operations performed in the world to-day are required on account of infections, adhesions and pus collections due to gonorrhea (7). These are higher than the percentages given by other authorities, but even the lowest is enough to stir the most indolent to activity.

In addition to the operations, equally frequent are those patients who are made invalids for life. Worse than these, however, are the cases who become mentally unbalanced on account of the removal of their sexual organs which were so damaged by the inflammatory process that the gynecologist found them useless or dangerous. A large number of these cases are due to latent gonorrhea from apparently cured husbands.

3. Sexual Neurasthenia, so frequently caused by gonorrhea, is one of the most intractable conditions with which they have to contend, and undoubtedly makes the patient more unhappy than any other non-fatal disease. From the number of cases with which I have come in contact, who have explained how depressed they were, and that on a number of occasions they had contemplated suicide, I feel justified in saying that this condition next to financial embarrassment and love affairs is the main cause of self-destruction. I am equally positive that a certain per cent. of these cases become insane. It is also without doubt a frequent cause of divorce.

4. Sterility.—Through its effect on the epididymes and prostate gland it plays the main role in causing sterility and impotence in men. Benzler (8) followed the history of 474 soldiers with gonorrhea and found sterility resulted in 10 per cent. of the cases of urethral involvement; 23 per cent. where there was unilateral epididymitis and 41 per cent. where the epididymitis was double. Impotence is one of the disastrous results of damage to the prostatic urethra by the inflammation. It may be complete or partial, as imperfect erection, premature ejaculation, or loss of normal sensation apparently due to the destruction of the nerve endings in this part of the urethral canal (9).

According to Neisser, 50 per cent. of all involuntary childless marriages are due to gonorrhea. Cervical catarrh prevents the entrance of the spermatozoa, thereby rendering the woman sterile. After the inflammatory process has reached the endometrium and tubes, still further obstruction prevents the fertilization of the ovum even when the disease has not progressed to pus formation.

Bland-Sutton says gonorrhea is the chief cause of sterility of the prostitute class (7). Morrow has shown that women having it frequently can only give birth to one child, and subsequent trouble is likely to date from this event which furnishes ideal conditions for the growth and spread of the gonococci.

Some of the worst results of gonorrhea are not due so much to gonococci, which as a rule limit themselves to the mucous membranes, but to the secondary infections that are afforded extremely favorable conditions for their growth.

DeWarker (10) gives the first place to gonorrhea in the three diseases (gonorrhea, tuberculosis and syphilis) that press urgently for solution. He gives it the first place, not because it is more destructive to life than tuberculosis, but on account of its greater dangers to society, in its power to impair fertility and to permanently infringe upon usefulness.

5. General Gonococcal Infections have also been reported very frequently in recent years, and Winn (11) states that the lesions and symptoms depend upon three factors:

(1) Direct infection with the gonococcus itself; (2) absorption of a toxin (gonotoxin), and (3) mixed infection with other germs Krause (2) demonstrated gonococci in the blood during life, and Ullmann has reported five cases of fatal gonorrheal pyemia, in four of which a necrosy showed the point of origin to be a prostatic abscess. Gonorrheal infection has no special clinical features which can differentiate it from other pyemias, and a positive diagnosis can only be made by a bacteriological examination of the blood or from an accessible lesion. Krause call attention to the ease with which gonococci may be overlooked, which only grow to small colonies in blood, and in cultivating them the agar must not be heated above 41 degrees C.

6. Blindness.—Formerly about 50 per cent. of all blindness was due to gonorrhea, but since the adoption of Crede's prophylactic measures this has been reduced to about 20 per cent. Even with this reduction it may still be given as evidence against gonococci, and to further strengthen the case against their attack on the innocent helpless children Holt has recently shown that gonococcal infections and vaginitis are exceedingly frequent in institutions for children, highly contagious and difficult to control. He says where this infection is known it is justly regarded as the bete noire of institutions for children, the importance of which has only just begun to be appreciated. Twenty-six cases of gonococcal arthritis are reported, and it is claimed that a pyemic arthritis in a young infant is much more frequently due to the gonococcus than to the streptococcus or any other pyogenic organism.

7. The Need for Reporting These Diseases.—All efforts to study venereal diseases are hampered by the absolute lack of any reliable statistics in this country, and the attempt to have them reported purely for statistical purposes, without the names of the individuals, is most heartily approved. "While venereal diseases cause more deaths and deplete the population by causing abortion and preventing conception more than any other known disease or condition, this subject is largely ignored by sanitary bureaus in their registration of contagious diseases" (7). It is only in this way that the laity

physicians, and especially philanthropists, are to be shown the necessity of taking steps to check the ravages of these diseases which, although sapping the vitality and life-blood of the nation continue to be ignored. No city in this country has adequate hospital accommodations for the venereal patients. There is no more crying need today than for efficient treatment and medicine for all poor patients before the disease has tightened its relentless hold, and they are doomed, for life, to be sterile, impotent, or invalids.

In conclusion, gentlemen, I hope the facts I have reviewed will enable you to appreciate more fully the importance of gonorrhea, its widespread and far-reaching effect, and trust none of you will admit it a disease to be feared no "worse than a cold in the head," and will combat any such criminal ideas on all occasions.

BIBLIOGRAPHY.

1. Holton: Journal American Medical Association, March 11, 1905.
2. Peterkin: North West Med., Vol. II, No. 9, 1905.
3. Kelly: Jour. A. M. A., March 4, 1905.
4. Heidingsfeld: Jour. A. M. A., January 30, 1904.
5. Weiss: Jour. A. M. A., January 24, 1903.
6. Johnson: Jour. A. M. A., March 11, 1905.
7. Benzler: Archiv f. Dermatol. and Syph., Band XLV, Heft 1.
8. Progres. Md. December, 1899.
9. De Warker: New York and Philadelphia Med. Journal.
10. Winn: The Lancet, February 11, 1905.
11. Krause: Berlin klin. Woch., May 9, 1904.—Atlanta Med. Record of Medicine and Surgery.

THE THERAPEUTIC VALUE OF ESERINE IN OPHTHALMIC PRACTICE.

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Eserine, the alkaloid of *Physostigma venenosum*, was discovered by Vee and Deven in 1864. It occurs in colorless, very hygroscopic crystals, which changes readily to a resinlike mass. It is soluble in ether, chloroform, and alcohol, but is sparingly soluble in water. It forms salts with acids, two of which are official, the sulphate being more freely soluble; its solution, however, turns reddish on long exposure to light. The salicylate is less soluble, but more stable.

Petit and Polonofsky conducted experiments with the view of discovering salts which would be more stable; they made eserine benzoate, eserine meta-creosotate, eserine citrate, and eserine tartrate, without any good results.

As a therapeutic agent in ophthalmic practice eserine was introduced by Argyll-Robertson in 1865. When a drop of a half-per-cent solution of eserine is instilled into the conjunctival sac, the physiological effect will show itself within ten minutes by a contraction of the pupil. This physiological phenomenon results from the direct action of the drug upon the peripheral nerve terminals. It is a local action, producing its effect without interference with the nerve center. It affects only the pupil of the eye in which the alkaloid has been instilled. The solution passes through the cornea by diffusion into the vitreous, and acts directly upon the terminal nerves of the iris as well as upon the ciliary muscle. On account of its physiological action in diminishing the size of the pupil, it is classified as a myotic. The pupil as a result of the action of eserine contracts, but is not immobile, and its influence to light does not cease. Concentrated light still affects the pupillary reaction.

The action on the pupil begins within ten minutes after the instillation and attains its maximum in about forty minutes. The effect of the drug begins to diminish in about six hours, and ceases in about four days. When the contraction is at its height the pupil will not react to direct ordinary light, but consensual reaction is still present. During the stage of maximum contraction the pupillary space is rather irregular in outline.

How this physiological effect is produced by local action on the nerve fibers is still a matter of discussion. Greenhagen and Ragon are of the opinion that the contraction of the pupil is due to a tetanic state of the circular fibers innervated by the oculomotor nerve. Frazer and Hirshman on the other hand maintain that it is due to a paralysis of the sympathetic or dilator fibers. Bartholow thinks that the nerves innervating both sets of fibers are acted upon, the sympathetic being depressed, while the motor oculi is stimulated. The contraction of the pupil following the instillation of eserine is tonic in character. The pupil becomes the size of a pin-point; the reflex action, however, is not completely abolished; a galvanic current applied to an eye under the influence of eserine will dilate the pupil. A strong mydriatic such as atropine will also produce a dilatation of the pupil.

Simultaneously with the manifestation of this pupillary phenomenon a feeling of great tension is produced, which very often in predisposed cases in people with an idiosyncrasy gives rise to nausea and cephalalgia. Pain in the eyeball, metamorphopsia, and artificial myopia re-

sult very often from the use of this drug. These apparent toxic manifestations of the alkaloid are really not due to its direct action upon the general nervous system, but are the result of its local action upon the iris and ciliary muscles, producing spasm of accommodation with a possible unequal refractive state of the two eyes, giving rise to headaches, nausea, and dizziness. According to Ball, eserine may produce intoxication, tonic convulsions, hallucinations and delirium, particularly in the aged and in feeble persons (Modern Ophthalmology, p. 134).

Eserine employed in sufficient strength will not only act upon the iris in diminishing the size of the pupil, but will also act upon the ciliary muscles, producing a tonic contraction of the muscles of the ciliary body with a resulting spasm of accommodation. The action upon the pupil, however, is more energetic than the action upon the ciliary muscles. The effect of its action upon the ciliary muscles manifests itself later and ceases sooner than that on the pupil. The physiological effect of eserine influences the accommodation by bringing both the far and near point of distinct vision toward the eye, so that there is no loss of accommodation, but the impulse required for accommodation for a certain distance is much lessened. At the height of the action of the drug, which is about forty minutes after the instillation, the punctum remotum as well as the punctum proximum are moved equally closer to the eye; the range of accommodation is therefore the same as before the instillation. As the action of the drug decreases the range of accommodation increases, because the punctum remotum returns sooner to its original place than the punctum proximum. The punctum remotum returns to its original place after six hours, while the punctum proximum does not return until after twenty-four hours. The visual effect as a result of the use of eserine depends upon its physiologic action on the ciliary muscles and varies with the refractive state of the eye. The emmetropic eye will under the influence of eserine become myopic. The ciliary muscles as a result of the physiologic action of eserine are in a state of tonic contraction; this causes a relaxation of the zonule of Finn, allowing the lens to become more spherical, increasing its refractive state. In the myopic eye the degree of myopia will increase, while in the hyperopic eye the degree of hyperopia will be lessened, or the eye may become emmetropic, and in the low degree of hyperopia the eye may become myopic.

An interesting visual phenomenon manifests itself after the instillation of eserine, namely, objects appear to be larger than usual. This condition is known as macropsia. This originates in a delusion as to distance resulting from the disturbance of the accommodation.

In spasm of accommodation, the act of accommodation for any given distance of an object requires less effort than under ordinary circumstances, because the far as well as the near point has moved toward the eye. We therefore estimate the accommodation at a low figure and think the object further away than it really is, but since the angle of vision remains the same we conclude that the object itself is larger.

The effect of eserine upon the intraocular tension is of utmost importance from the ophthalmic standpoint. It is the general opinion of ophthalmologists and therapeutists that eserine lowers the intra-ocular pressure. This it accomplishes by its action upon the iris. In contracting the pupil it stretches the iris in its radial direction, makes it flat, and then draws it away from the eyeball, freeing the sinus of the chamber, allowing full drainage by its channels, relieving the passive congestion, and at the same time reducing the intra-ocular pressure. The physiological effect upon the vascular system is manifested by a contraction of the lumen of the superficial conjunctival vessels; as a result of this action eserine reduces the congested condition of the conjunctivae, lessens its secretion, and checks the migration of white blood-corpuscles. This local effect of vasomotor constriction is, however, counterbalanced by the fact that it produces sometimes congestion of the iris and deep ciliary vessels, a fact to be remembered when the drug is used in inflammatory conditions of the iris or uveal tract.

INDICATIONS FOR THE USE OF ESERINE.

Formerly eserine was employed rather frequently; at present its usefulness is limited to those conditions only in which a reduction in intra-ocular pressure is to be effected. Introduced in ophthalmic practice in 1865, it has been employed ever since in various diseased conditions:

1. Von Graef employed eserine for its myotic action in all cases preparatory to iridectomy for the purpose of guarding against prolapse of the iris.
2. In sclerotomy to prevent prolapse of the iris eserine has some value, because the spasmodically contracted sphincter pupillae keeps the iris in the anterior chamber.
3. In paralysis of accommodation eserine exerts a beneficial influence by its action upon the ciliary muscle. This action is, however, not permanent. In transitory paralysis as in postdiphtheric paralysis of accommodation it should not be used.
4. The myotic principle of eserine may counteract the mydriatic and cycloplegic effect of the so-called mydriatic class of drugs. But

this effect is only temporary, while very often the endeavor to counteract the effect of atropine by eserine is followed by severe headaches and neuralgic pains in the eyeball; it is best not to use it except in cases of necessity.

5. In radial iridodialysis eserine is of great importance because it flattens the iris and puts it on a stretch, thereby bringing the cut surfaces in approximation, which allows union to take place, and the iris heals and returns to its normal condition.

6. In marginal ulcers of the cornea with danger of perforation some authors advise eserine for the purpose of preventing prolapse of the iris.

7. In keratoconus eserine is also indicated, as the marked contraction of the pupil lessens the intra-ocular pressure, and therefore reduces the strain upon the attenuated cornea and gives it temporary protection. Again, in contracting the pupil in these unfortunate cases, it helps in producing a more clear image of the objects of fixation.

8. The chief therapeutic value of eserine is in glaucoma, because of its power to reduce intra-ocular pressure. In 1876 Lagueur found that eserine reduces intra-ocular pressure, and it has been used ever since with considerable success. Eserine may abort an acute attack of glaucoma by facilitating the outflow of the ocular fluid, which it accomplishes by enlarging the filtration angle. It is of service in both the acute inflammatory and the chronic non-inflammatory forms of glaucoma. It is a therapeutic synergist to iridectomy, but not a substitute.

9. In paralytic mydriasis eserine may be employed with some degree of success.

10. In posterior synechia eserine may help to break up the adhesions when employed intermittently with atropine.

11. In coal-miner's nystagmus eserine is said to reduce the oscillatory movements.

12. In neuralgic pains of the eyeball, especially in elderly people with a hardened sclera, eserine when judiciously employed will often give relief.

13. Photophobia due to retinal hypersensitiveness will often be relieved by a weak solution of eserine.

CONTRAINDICATIONS TO THE USE OF ESERINE.

1. In keratitis, superficial or deep-seated, eserine should not be employed.

2. In iritis and cyclitis eserine is contraindicated because it increases the congestion in the iris and ciliary body; again, it places

the iris and ciliary body in a state of spastic contraction, which only increases the pain.

3. In acute choroiditis, retinitis, or chorioretinitis eserine is positively harmful, for the tonic contraction of the ciliary puts the choroid and retina on a stretch, and thus increases the discomfort and intensifies the inflammatory process.

4. In myopic eye, theoretically speaking, eserine should not be used, especially in progressive myopia, except it be for the purpose of reducing intra-ocular tension in a glaucomatous condition of a myopic eye; for not only does eserine cause a temporary increase in the myopia by the spasmodic contraction of the ciliary muscles, but it stretches the already weak choroid of the myope, and if used frequently, may convert an ordinary stationary myopia into a progressive myopia.

5. In radial iridodialysis eserine is contraindicated, as it increases the sphere of the opening, making the gap wider, and prevents union of the separated edges.

6. Glasses should not be prescribed while the eye is under the influence of eserine, for not only does eserine cause an artificial reduction in the refractive state, but also causes an artificial astigmatism; and glasses given under such circumstances may do considerable harm.

Considering the physiological action of eserine one may safely say that its chief therapeutic value in ophthalmology depends on its power to reduce intra-ocular pressure, and its usefulness is in the treatment of glaucoma; and even in glaucoma it is not to displace the more radical treatment by iridectomy, but rather an aid to it, or wherever iridectomy is inadvisable. While it was employed rather frequently in the past, at present its usefulness is limited to the conditions indicated.—*Therapeutic Gazette*,

In cases presenting the symptoms of acute epididymitis orchitis, in which the history and examination fail to show any evidence of gonorrhea, it is always well to consider the possible presence of a torsion of the spermatic cord. The symptoms of the latter condition often resemble those of an acute orchitis, namely, pain, swelling, marked tenderness, and more or less fever. The chief distinguishing points are that in torsion of the cord the pain comes on suddenly after physical exertion, straining, coughing, etc., and is often attended with marked depression and even collapse. The tenderness also appears earlier than in orchitis and is much more intense, while on examination of the cord a very sensitive swelling can be felt.—*International Journal of Surgery*.

Miscellaneous Notes.

The Nobel Prize committee is understood to have decided to award the prize for medicine to Prof. Robert Koch.

Attacks of abdominal pain preceded by "rumbling" of the bowels is suggestive of some obstructive condition.—American Journal of Surgery.

Do not empty a thyro-glossal cyst by aspiration before extirpating it. It is well to inject the cavity with a methylene blue solution first, in order to make sure that all parts of the cyst wall will be extirpated. Another method is to first empty the cyst and then fill it with paraffin.—American Journal of Surgery.

For a single intravenous infusion, as to combat the shock of hemorrhage, it is not essential that the solution contain any of the blood salts but the most abundant one—sodium chloride. For repeated infusions, however, as sometimes used in treating various toxemias, it is better to employ also the other salts, the solution being made of sodium chloride 0.9, potassium chloride 0.03, calcium chloride 0.02, water 100.—American Journal of Surgery.

RESOLUTIONS.

Resolved, That we, the members of the Shelby County Medical Society, tender Dr. W. H. Sanders a rising vote of thanks for his untiring and successful work during the past summer and fall in his notable crusade against the introduction and spread of yellow fever in the State of Alabama.

Resolved, That we send a copy of this resolution to the Alabama Medical Journals for publication.

The resolutions were unanimously passed.

A TEACHING POSITION FOR DR. WOODBURY.

Cornell University Medical School has organized a new department of public hygiene and sanitation in which Dr. John McGaw Woodbury, Street Cleaning Commissioner of the City of New York, will be the chief. His lectures will deal with the municipal problems which he is daily encountering, among which the sanitation of cities, the disposition of garbage and refuse, public water supply and other similar topics will naturally receive an amount of attention commensurate with the practical experience of the lecturer in these departments of public hygiene.—Ex.

X-RAY DIAGNOSIS OF RENAL CALCULUS.

Morton Smart (British Med. Jour., Sept. 16, 1905), describes the "Cathode" and X-Rays and discusses the possible errors in diagnosis, which may occur on account of the character of the stone, the size of the patient and the condition of the kidneys. He deduces the following conclusions:

1. That the method is an extremely useful auxiliary to the ordinary methods of diagnosis.

2. That the method should be resorted to in every case of suspected stone, and that no operation should be decided upon until the case has been carefully photographed.

3. That the method entails a great responsibility and should in every case be carried out with the greatest possible care, for the patient's sake as well as for the operator's reputation, as a mistake may lead to such serious consequences.

4. That the great increase in the power of the apparatus used, and the increased knowledge of how to obtain the best results, will soon enable X-ray specialists to exclude all doubt in the interpretation of a negative.

5. That in cases where the negative shows the shadow of a stone and an operation is decided upon, the patient should be rephotographed under as nearly as possible similar conditions, a day or so prior to the operation. I consider this necessary, because in one case a patient was photographed and a diagnosis of renal calculus was made. The operation took place some time afterwards, and no stone was found in the kidney. Another photograph was taken shortly after the operation, and the stone was again seen, but this time it was in the ureter. During the interval between taking the photograph and performing the operation the stone had moved downwards.

6. Lastly, I think every case should be taken stereoscopically at least once.

ABSTRACTS OF THE LEADING ARTICLES OF THE MONTH.

Oxygenated Water in Dermatology and Urology.

Scholtz (British Medical Journal) has used 30-per-cent. oxygenated water in the following affections: (1) Ulcerative processes of the skin, especially when gangrenous; (2) ulcerative stomatitis, especially when purulent and ulcerative. In these cases a mouth-wash of two or three per cent. is used, and a strong solution painted on the gums daily. (3) Suppurating buboes and gangrenous or serpiginous forms of soft chancre; (4) buccal leucoplasia, when the solution is painted on either alone or with nitrate of silver; (5) comedones, acne, syph-

ilides, and other pigmentary conditions have sometimes given good results; (6) in several forms of cystitis an injection of one to three per cent. of the solution was used. In chronic gonorrhoea and post-gonorrhoeal urethritis injections of one-half to one-per-cent. solution, generally combined with nitrate of silver 1 in 1000 to 1 in 4000, gave good results. The injections lasted one to five minutes, and from 150 to 600 cubic centimeters of the solution were used.

THE ETIOLOGY OF ECLAMPSIA.

After discussing the various theories of eclampsia Hugo Ehrenfast (St. Louis Courier of Med., Sept., 1906) says:

"In concluding my remarks I wish to point out briefly a few of the mistakes that are commonly made in the conclusion of the causation of eclampsia. These seems to exist a great deal of confusion between cause and effect. Many of the pathologic changes described in kidneys and liver are not so much the cause as the result of toxemia, and only secondarily, by way of the vicious circle which I have endeavored to explain to you, help to exaggerate the existing toxemia. Another mistake which is very prevalent, is, that altogether too much stress is laid upon the importance of the kidneys. I have demonstrated that the kidneys certainly are not the only organs which by elimination prevent a pathologic accumulation of toxins. The function of liver or thyroidea are just as important in this respect. Of course, the urine offers an easy means of ascertaining the conditions of the kidneys, and therefore, it is so much easier to recognize an alteration in their function. But I think it is absolutely useless to fight about the question which particular renal lesion is chiefly responsible for eclampsia. All is dependent upon the total work of all the eliminating organs, and if in some cases of eclampsia, no renal lesion can be detected, and no albumen is found in the urine, then probably in these cases the eliminative action of liver or thyroidea or another important organ is absolutely inefficient, or possibly, by some process still unknown to us, a very large amount of toxic material was suddenly thrown into the maternal circulation, too large to be taken care of by the 'organs of defense.'"

NEISSER'S RESEARCH ON MONKEYS IN THE EAST INDIES.

The *Deutsch med. Wochft.* is publishing Neisser's report of his months of research in the Dutch East Indies. He had the largest number of monkeys at his disposal that have ever been collected for a single purpose, a total of about 900, including eleven orang-outangs, from twenty to thirty gibbons and the rest smaller mon-

keys. He was particularly impressed with the morbidity of the monkeys, intestinal diseases, dysentery and helminths making constant ravages among them. He found that there is not a great difference between the smaller monkeys and the orang-outangs and gibbons in respect to infection with syphilis, as has been previously assumed. The higher species are more susceptible, but the infection proceeds about the same in each kind of monkey. All his attempts to preserve syphilitic material for use at a later date has proved fruitless. All virulence had vanished by the sixth or seventh hour after removal from the body. Even from the cadaver, inoculations were always negative after an interval of eighteen hours. Excision of the focus a few hours after infection was unable to arrest the generalization of syphilis, and the most varied attempts to prevent the development of the infection after inoculation never proved successful. The generalization of the infection could usually be demonstrated by the fifty-fourth to the hundred and fortieth day after the inoculation. Simultaneous mercurial treatment never succeeded in preventing the development of the primary lesion, and, in one instance, material from a mercury-treated animal proved exceptionally virulent when inoculated into others.—Journal A. M. A., Jan. 27th.

VAGINAL CYSTS.

Voitfureiez reports a case of this nature. The patient, a woman twenty-five years old, had given birth three months previously to a well-formed child. The labor was normal. A month later the presence of a small tumor in the vagina was discovered. On inspection it was found that the vulvar orifice was filled up with a rounded swelling. The growth was semi-transparent, of a red color, and the visible part was as large as a nut. The base of the tumor was attached to the anterolateral wall of the vagina. The tumor was sessile. Under general anesthesia the cyst was removed. It proved to be the size of a pigeon's egg. The writer in giving a resume of the characteristics of such growths states that they are generally found in young women after delivery. They probably develop during pregnancy. However, they have been observed in small children. The cause is generally attributed to the renewal of vital activity in the debris of the Wolffian body. These vaginal cysts are single or multiple. At times they are bilateral. The form is often elongated, accommodating itself to the axis of the vagina; these growths are always behind the vulva, but they may project outside. The size varies greatly. There is discomfort in walking, and during labor the vaginal cyst presents an obstacle. There is no real pain except in cases in

which the cyst is inflamed and suppurating. Diagnosis is made by direct examination. The patient often believes that she is suffering from prolapsus uteri.—*Revue Francaise de Medecine et de Chirurgie*, Medical Record.

SURGICAL TREATMENT OF HYDRATID CYSTS OF THE ABDOMEN.

The operation for hydatid cyst that is generally adopted consists of direct incision, followed by fixation of the cyst walls to those of abdomen, and drainage. According to Mabit, this method has certain disadvantages, principally dependent on secondary infection as a result of the prolonged drainage. He has substituted another operation, which consists in removing as much of the cyst wall as possible, after emptying its contents and flushing it out with boric acid solution. Care must be taken, of course, to protect the peritoneal cavity from infection with the daughter cysts. Only that part of the mother cyst wall is left which is included in the parenchyma of the organ. After carefully cleaning and drying this part, it is returned to the abdominal cavity, and the wound is closed without drainage. The author has performed this operation in 18 cases, with almost invariable success. In only one case was it necessary to reopen the abdomen and establish drainage. The dangers of hemorrhage and of biliary fistula are avoided, and peritoneal infection was never observed.—(B. K.)

FUNCTIONAL IMPOTENCE SECONDARY TO ARTICULAR TRAUMA.

Mally and Richon close an article, running through several numbers, with their conclusions and a table of 36 cases. They assert that reflex amyotrophy of articular origin should occupy an important place in general surgical pathology. It explains the pathogenesis of many articular affections, such as passive dislocations, painful flat-foot, genu valgum of adults, scoliosis, and others. The functional impotence is secondary to spinal lesions, which result from the articular trauma and consist of diminution of motor cells in the anterior horns. Later, the nerves to the joints undergo partial degeneration and muscle fibers atrophy. Trophic centers which preside over the nutrition of periarticular tissues, are probably involved also. Reaction to electric currents serves to establish prognosis. Early cases are usually curable, chronic, incurable. In the incurable patients, static electricity will relieve pain and spasm, faradization being contraindicated.—(A. G. E.)

SUCCESS AND FAILURE.

Each year hundreds of young men receive their diplomas and are supposed to be ready to attend to the ailments that afflict poor suffering humanity. The Medico-Chirurgical Journal says that each of these young men should ask himself what he is going to do with his life. "There are many doctors, who have achieved a high reputation in their profession, who have still made a failure of their lives. Their aims have been low. They have not had a high ideal of their profession, and as a consequence they have missed the better part of life. Mere skill in diagnosis or with the knife does not mean success in the highest sense. It is in the moral sphere that the doctor, like every other man, gains greatest success. It is the duty of every man to make the best of what is in him. Unless he works, from a sense of duty, in this direction his successes will be merely of a temporal nature. He may make a discovery or two in the practice of medicine which are of use to mankind, but he will have left no lasting impression on the world. In fact, the world would have been as well off if he had never lived, for some other man would soon have made the same little technical discovery."

A REMEDY FOR CHOLERA.

C. D. Ussher, Van, Turkey in Asia, (Journal A. M. A., February 3), inspired by Koch's statement that quinin in 1 | 1000 to 1 | 2500 solution destroyed the cholera germ in from ten to thirty minutes, has used the drug in the treatment of cholera, giving ten grain doses every hour till bile reappears in the stools; from forty to eighty grains have been thus given. While under the old treatment nearly every case was fatal, under this medication 90 per cent. of the patients recovered, including some who were almost moribund. The method is described as follows: Quinin sulphate. grains 10, every hour till ricewater stools ceased and bile reappeared; sweet spirits of niter, dry cupping, heat and friction for suppression of urine; saline injections when the wrist pulse had disappeared (some of these patients recovered under the quinin without injection). Occasionally a diarrhea mixture was employed if intestinal irritability continued after the reappearance of bile. If irritability with foul odor persisted, a mixture of equal parts of sulphophenolates of zinc, calcium and sodium was used at intervals of from two to four hours.